

4.8 LAND USE, SPECIAL MANAGEMENT AREAS, RECREATION AND PUBLIC INTEREST AREAS, AND AESTHETIC RESOURCES

4.8.1 Significance Criteria

An adverse impact on land use, special management areas, recreation and public interest areas, and aesthetic resources would be considered significant and would require mitigation if Project construction or operation would:

- conflict with existing land use plans, policies, or regulations established by a jurisdiction directly affected by the Project (see Section 1.5);
- convert more than 1 percent of agricultural lands in a county to a non-agricultural use or impair the productivity of more than 1 percent of agricultural land in a county;
- result in the loss of more than 1 percent of the acreage planted in a county's most valuable crop;
- displace a business or permanent residence from its established location, or disrupt access to a business or permanent residence for more than 14 days;
- conflict with any approved residential or commercial development plans;
- cause long-term property damage and create construction-related hazards to residents of dwellings within 100 feet of the pipeline;
- physically divide an established community;
- prevent access to an established recreation area during its peak use periods or for more than 1 year;
- result in the loss of 10 percent or more of an established or planned recreation site, or prevent access to the site, during its peak use periods or for more than 1 year;
- adversely affect ACECs, wilderness areas, wilderness study areas, or other areas of special environmental concern;
- provide access to previously inaccessible, environmentally sensitive areas;
- result in reductions in the quality of the recreation experience for more than one visitor use season (such as from increased noise and dust, reduced visual quality from landscape modifications and night illumination, reduced visibility, and reduced water quality);
- cause inconsistency with adopted Visual Resource Management (VRM) Plans or local ordinances. In those areas where no VRM Plans exist, significant impacts are determined by examining the study area for sensitive viewsheds, areas of high user volumes, and areas of unique visual resources. Sensitive resources are then examined on a case-by-case basis to determine level of impact. Significant impacts are those that dominate the viewshed from sensitive locations and change the character of the landscape both in terms of physical characteristics and land uses;

- result in a substantial adverse effect on a scenic area or vista;
- substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic area or highway;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

4.8.2 Land Use and Ownership

Construction of the North Baja Pipeline Expansion Project would disturb approximately 1,760.5 acres of land, including the pipeline facilities, aboveground facilities, pipe storage and contractor yards, and access roads. Approximately 109.0 acres of the 1,760.5 acres used for construction would be required for operation of the Project. Of this total, about 106.9 acres would be for the pipeline facilities, 2.0 acres would be for the aboveground facilities, and 0.1 acre would be for permanent access roads associated with the proposed facilities. The remaining 1,651.5 acres of land would be restored and allowed to revert to former use. Table 4.8.2-1 summarizes the acres of each land use that would be affected by construction and operation of the Project.

Pipeline Facilities

The Project would involve the construction of 127.6 miles of pipeline facilities of various diameters in La Paz County, Arizona and Riverside and Imperial Counties, California (see Table 2.1.1-1). Of the 127.6 miles of proposed pipeline route, approximately 126.9 miles (99 percent) would be constructed in or adjacent to various existing rights-of-way (see Table 2.2.1-1). The B-Line and the Arrowhead Extension would be entirely in or adjacent to existing rights-of-way. Of the 45.7 miles associated with the IID Lateral, 0.7 mile (2 percent) would be constructed on newly created right-of-way that does not parallel existing rights-of-way.

Table 4.8.2-2 lists the land uses that would be crossed by the proposed pipeline facilities. The predominant land use that would be crossed is open land, comprising about 80.1 miles (63 percent) of the pipeline routes. Anthropogenic (i.e., industrial/commercial/utility) uses are the second most prevalent land use, comprising 43.9 miles (34 percent) of the proposed pipeline routes. Other land uses that would be crossed by the pipeline facilities include 3.3 miles (3 percent) of agricultural land and 0.4 mile (less than 1 percent) of open water.

Land use impacts associated with the Project would include the disturbance of existing land uses within the construction right-of-way during construction and retention of a new permanent right-of-way for operation of the pipeline facilities. North Baja proposes to generally use a 105-foot-wide construction right-of-way for the B-Line, consisting of North Baja's existing 50-foot-wide permanent right-of-way and 55 feet of temporary workspace. In most areas, about 80 feet of the construction right-of-way would overlap the previously disturbed right-of-way. The B-Line would be installed within North Baja's existing 50-foot-wide permanent right-of-way using a standard 25-foot offset from the existing A-Line. No new permanent right-of-way would be required for operation of the B-Line.

TABLE 4.8.2-1

Acres of Land Affected by Construction and Operation of the North Baja Pipeline Expansion Project

Facility	Open Land ^a		Anthropogenic ^b		Agriculture ^c		Open Water ^d		Total		
	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	New Dist.	Oper.
B-Line											
Pipeline Facilities											
Pipeline Right-of-Way	869.8	0.0	117.7	0.0	28.0	0.0	0.0	0.0	1,015.5	234.0	0.0
Temporary Extra Workspace	<u>93.5</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>34.7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>128.2</u>	<u>51.2</u>	<u>0.0</u>
<i>Pipeline Facilities Subtotal</i>	<i>963.3</i>	<i>0.0</i>	<i>117.7</i>	<i>0.0</i>	<i>62.7</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>1,143.7</i>	<i>285.2</i>	<i>0.0</i>
Aboveground Facilities	1.5	0.5	0.8	0.0	0.0	0.0	0.0	0.0	2.3	2.3	0.5
Pipe Storage and Contractor Yards	5.0	0.0	45.4	0.0	0.0	0.0	0.0	0.0	50.4	0.0	0.0
Access Roads	<u>97.4</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>2.3</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>99.7</u>	<u>0.0</u>	<u>0.0</u>
<i>B-Line Subtotal</i>	<i>1,067.2</i>	<i>0.5</i>	<i>163.9</i>	<i>0.0</i>	<i>65.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>1,296.1</i>	<i>287.5</i>	<i>0.5</i>
Arrowhead Extension											
Pipeline Facilities											
Pipeline Right-of-Way	0.0	0.0	7.2	0.0	13.4	4.7	0.0	0.0	20.6	20.6	4.7
Temporary Extra Workspace	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>1.7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>1.7</u>	<u>1.7</u>	<u>0.0</u>
<i>Pipeline Facilities Subtotal</i>	<i>0.0</i>	<i>0.0</i>	<i>7.2</i>	<i>0.0</i>	<i>15.1</i>	<i>4.7</i>	<i>0.0</i>	<i>0.0</i>	<i>22.3</i>	<i>22.3</i>	<i>4.7</i>
Aboveground Facilities	0.0	0.0	1.0	0.3	1.0	0.8	0.0	0.0	2.0	2.0	1.1
Pipe Storage and Contractor Yards	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Access Roads	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.</u>	<u>0.0</u>
<i>Arrowhead Extension Subtotal</i>	<i>0.0</i>	<i>0.0</i>	<i>8.2</i>	<i>0.3</i>	<i>16.1</i>	<i>5.5</i>	<i>0.0</i>	<i>0.0</i>	<i>24.3</i>	<i>24.3</i>	<i>5.8</i>
IID Lateral											
Pipeline Facilities											
Pipeline Right-of-Way	113.5	42.5	245.7	59.7	1.0	0.0	0.0	0.0	360.2	360.2	102.2
Temporary Extra Workspace	<u>25.0</u>	<u>0.0</u>	<u>3.4</u>	<u>0.0</u>	<u>14.7</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>43.1</u>	<u>43.1</u>	<u>0.0</u>
<i>Pipeline Facilities Subtotal</i>	<i>138.5</i>	<i>42.5</i>	<i>249.1</i>	<i>59.7</i>	<i>15.7</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>403.3</i>	<i>403.3</i>	<i>102.2</i>
Aboveground Facilities	0.4	0.2	2.5	0.2	0.0	0.0	0.0	0.0	2.9	2.9	0.4
Pipe Storage and Contractor Yards	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	22.7	22.7	0.0
Access Roads	<u>3.8</u>	<u>0.1</u>	<u>1.3</u>	<u>0.0</u>	<u>6.1</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>11.2</u>	<u>0.2</u>	<u>0.1</u>
<i>IID Lateral Subtotal</i>	<i>142.7</i>	<i>42.8</i>	<i>275.6</i>	<i>59.9</i>	<i>21.8</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>440.1</i>	<i>429.1</i>	<i>102.7</i>

TABLE 4.8.2-1 (cont'd)

Acres of Land Affected by Construction and Operation of the North Baja Pipeline Expansion Project

Facility	Open Land ^a		Anthropogenic ^b		Agriculture ^c		Open Water ^d		Total		
	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	New Dist.	Oper.
Project Subtotal											
Pipeline Facilities											
Pipeline Right-of-Way	983.3	42.5	370.6	59.7	42.4	4.7	0.0	0.0	1,396.3	614.8	106.9
Temporary Extra Workspace	<u>118.5</u>	<u>0.0</u>	<u>3.4</u>	<u>0.0</u>	<u>51.1</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>173.0</u>	<u>96.0</u>	<u>0.0</u>
<i>Pipeline Facilities Subtotal</i>	<i>1,101.8</i>	<i>42.5</i>	<i>374.0</i>	<i>59.7</i>	<i>93.5</i>	<i>4.7</i>	<i>0.0</i>	<i>0.0</i>	<i>1,569.3</i>	<i>710.8</i>	<i>106.9</i>
Aboveground Facilities	1.9	0.7	4.3	0.5	1.0	0.8	0.0	0.0	7.2	7.2	2.0
Pipe Storage and Contractor Yards	5.0	0.0	68.1	0.0	0.0	0.0	0.0	0.0	73.1	22.7	0.0
Access Roads	<u>101.2</u>	<u>0.1</u>	<u>1.3</u>	<u>0.0</u>	<u>8.4</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>110.9</u>	<u>0.2</u>	<u>0.1</u>
Project Total	1,209.9	43.3	447.7	60.2	102.9	5.5	0.0	0.0	1,760.5	740.9	109.0

^a Open land includes undeveloped, desert scrub-shrub lands, and wetlands.

^b Anthropogenic land includes paved or unpaved roadways (e.g., 18th Avenue and Imperial County roadways) as well as road crossings and other industrial/commercial/utility uses.

^c Agricultural land includes cropland, which typically consists of alfalfa, wheat, cotton, and irrigated pasture, and, to a lesser extent, vegetable truck crops.

^d Open water includes open expanses of water such as the Colorado River, All-American Canal, and Highline Canal crossings. Because these waterbodies would be crossed using the horizontal directional drill method, no open water would be affected by construction or operation of the Project.

Const. = Construction.

Oper. = Operation.

New Dist. = New disturbance (i.e., not disturbed during construction of the A-Line).

Note: The totals shown in this table may not equal the sum of addends due to rounding.

TABLE 4.8.2-2

Land Uses Crossed by the Pipeline Facilities Associated with the North Baja Pipeline Expansion Project (miles)

Facility	Open Land ^a	Anthropogenic Land ^b	Agricultural Land ^c	Open Water ^d	Total
B-Line	68.3	9.1	2.2	0.3	79.8
Arrowhead Extension	0.0	1.0	1.1	0.0	2.1
IID Lateral	11.8	33.8	0.0	0.1	45.7
Project Total	80.1 (63%)	43.9 (34%)	3.3 (3%)	0.4 (<1%)	127.6 (100%)

^a Open land includes undeveloped, desert scrub-shrub lands, and wetlands.

^b Anthropogenic land includes paved or unpaved roadways (e.g., 18th Avenue and Imperial County roadways) as well as road crossings and other industrial/commercial/utility uses.

^c Agricultural land includes cropland, which typically consists of alfalfa, wheat, cotton, and irrigated pasture, and, to a lesser extent, vegetable truck crops.

^d Open water includes open expanses of water such as the Colorado River, All-American Canal, and Highline Canal crossings. Because these waterbodies would be crossed using the horizontal directional drill method, no open water would be affected by construction or operation of the Project.

Note: The totals shown in this table may not equal the sum of addends due to rounding.

Where the B-Line would be installed within or abutting the paved portion of 18th Avenue (a distance of about 7.6 miles), rights to build and operate the pipeline within the county road right-of-way would be authorized under a franchise agreement with Riverside County. Franchise agreements do not typically grant a specific strip of land, but simply allow the pipeline to be installed and operated within the road right-of-way. North Baja proposes to use a 60-foot-wide construction right-of-way to install the B-Line in the paved portion of 18th Avenue.

North Baja proposes to generally use a 100-foot-wide construction right-of-way for the Arrowhead Extension except when in the Arrowhead Boulevard roadway or road shoulder where a 60-foot-wide construction right-of-way would be used. The permanent right-of-way in all areas except when in the Arrowhead Boulevard roadway or road shoulder would be 35 feet wide. Rights to build and operate the pipeline within the Arrowhead Boulevard right-of-way would be authorized under an agreement between North Baja and Riverside County.

Where the IID Lateral parallels existing electric transmission lines, North Baja proposes to generally use an 80-foot-wide construction right-of-way and a 30-foot-wide permanent right-of-way. North Baja proposes to use a 60-foot-wide construction right-of-way and a 30-foot-wide permanent right-of-way where the lateral would be installed between a transmission line and a road. A 60-foot-wide construction right-of-way would also be used where the IID Lateral would be installed within or abutting the traveled portion of county roads. Rights to build and operate the IID Lateral within county road rights-of-way would be authorized under a franchise agreement between North Baja and Imperial County. Franchise agreements do not typically grant a specific strip of land, but simply allow the pipeline to be installed and operated within the road right-of-way. For the portion of the IID Lateral located in Evan Hewes Highway and other county roads, a 2-foot-wide permanent right-of-way has been assumed. In some cases, where the road right-of-way has not been expressly dedicated to the county, North Baja may acquire additional easements from private landowners. In these areas, a 30-foot-wide permanent right-of-way has been assumed.

Comments were received during the scoping process expressing concern that there is not enough room in the easements of Imperial County roadways for a pipeline. North Baja selected the proposed route in Imperial County roadways based, in part, on a field reconnaissance survey to identify roads with

fewer existing surface and buried utilities as well as consultation with the Imperial County Department of Public Works. Few obstacles were identified or noted that would prevent placement of a pipeline in the road easements. Where such constraints were identified (e.g., the Holtville-Orchard Road Overpass of Hunt Road), North Baja adjusted the proposed route to move outside the road right-of-way for a short distance.

In addition to the construction right-of-way, North Baja has identified temporary extra workspaces that would be required for staging areas and construction at waterbodies, roads, and railroads, and in areas of steep slopes and rugged terrain. The approximate locations and sizes of temporary extra workspaces identified by North Baja are listed in Table D-1 in Appendix D.

Construction of the pipeline facilities would affect a total of about 1,569.3 acres of land, including 1,396.3 acres for the pipeline rights-of-way and 173.0 acres for temporary extra workspace. About 858.5 acres or 55 percent is previously disturbed area associated with construction and operation of North Baja's existing A-Line. Open land would be the primary land use affected by construction of the pipeline facilities totaling about 1,101.8 acres (70 percent) (see Table 4.8.2-1). The remaining land uses that would be disturbed consist of 374.0 acres (24 percent) of anthropogenic land and 93.5 acres (6 percent) of agricultural land. No open water would be affected by construction of the pipeline facilities because open expanses of water such as the Colorado River, All-American Canal, and Highline Canal would be crossed using the HDD method (see Section 2.3.2).

Of the 1,569.3 acres of land that would be affected by construction of the pipeline facilities, about 106.9 acres would be retained as new permanent right-of-way. Of the 106.9 acres permanently retained, 59.7 acres (56 percent) is anthropogenic land, 42.5 acres (40 percent) is open land, and 4.7 acres (4 percent) is agricultural land. The land retained as permanent right-of-way would be allowed to revert to former use; however, tree crops such as orchards and aboveground structures would be prohibited on the permanent right-of-way. There are no restrictions on how close structures (e.g., houses) can be to the permanent pipeline right-of-way. The remaining 1,462.4 acres used for temporary construction right-of-way and temporary extra workspace would be allowed to revert to prior uses following construction with no restrictions.

The most valuable crops in the Project area include alfalfa in La Paz County, nursery stock in Riverside County, and vegetables and melons in Imperial County. Approximately 4.7 acres of agricultural land would be affected by operation of the proposed pipeline facilities and an additional 0.8 acre would be affected by operation of the proposed aboveground facilities. Because Riverside County has about 572,000 acres of farmland, the 5.5 acres that would be affected by operation of the proposed Project represents less than 0.001 percent of the total farmland in the county. Therefore, the Project would not result in the conversion of more than 1 percent of agricultural lands to a non-agricultural use or impair the productivity of more than 1 percent of agricultural land in a county. The Project would also not result in the loss of more than 1 percent of the acreage planted in a county's most valuable crop.

Construction and operation activities on approximately 89 percent of the lands affected by the Project would be authorized by various governmental entities including: the BLM (for Federal lands managed by the BLM, the BOR, and the FWS [53 percent]), California counties (36 percent), the States of Arizona or California or cities (less than 1 percent), or the CSLC (less than 1 percent). The remainder of the land that would be affected (11 percent) is privately owned. Table 4.8.2-3 summarizes the land ownership along the proposed pipeline facilities.

An easement would be used to convey both temporary (for construction) and permanent rights-of-way to North Baja. The easement gives the company the right to construct, operate, and maintain the pipelines, and establish a permanent right-of-way. In return, the company compensates the landowner for

use of the land. The easement agreement between the company and the landowner typically specifies compensation for loss of use during construction, loss of nonrenewable or other resources, damage to property during construction, and allowable uses of the permanent right-of-way after construction.

TABLE 4.8.2-3						
Summary of Land Ownership Crossed by the North Baja Pipeline Expansion Project (miles)						
Facility	Federal ^a	County	Private	CSLC	Other (State or City)	Total
B-Line	59.3	8.2	11.7	0.2	0.4	79.8
Arrowhead Extension	0.0	1.0	1.1	0.0	0.0	2.1
IID Lateral	8.1	36.5 ^b	0.7	0.0	0.4	45.7
Project Total	67.4	45.7	13.5	0.2	0.8	127.6
	(53%)	(36%)	(11%)	(<1%)	(<1%)	(100%)
^a Lands authorized by the BLM, including lands managed by the BLM, BOR, and the FWS. The BLM would issue a Right-of-Way Grant that would apply to all affected Federal lands after receipt of concurrence from the BOR and the FWS.						
^b Of this total, about 17.6 miles would be located within county road rights-of-way across BLM land.						
Note: The totals shown in this table may not equal the sum of addends due to rounding.						

If an easement cannot be negotiated with a landowner and the Project has been certificated by the FERC, North Baja may use the right of eminent domain granted to it under section 7(h) of the NGA and the procedures set forth under the Federal Rules of Civil Procedure (Rule 71A) to obtain the right-of-way and temporary extra workspace areas. North Baja would still be required to compensate the landowner for the right-of-way and damages incurred during construction. However, the level of compensation would be determined by a court according to State or Federal law. In either case, North Baja would compensate landowners for use of the land. Eminent domain does not apply to lands under Federal ownership (i.e., BLM, BOR, and FWS land).

Aboveground Facilities

Modifications at existing and construction of new aboveground facilities associated with the proposed Project would affect 7.2 acres of land. Of the 7.2 acres, 2.0 acres would be permanently converted for operation of these facilities. Table 4.8.2-4 summarizes the land requirements and land use for the aboveground facilities associated with the North Baja Pipeline Expansion Project.

The installation of a new pig receiver at the Ehrenberg Compressor Station would take place within the existing fenceline of the facility and would not require any additional land for construction or operation; however, a header pipe associated with the new pig receiver would be outside of the fenceline of the facility and would require 0.7 acre of anthropogenic land for construction (no permanent right-of-way would be required because the line would be installed on North Baja fee property). The aboveground modifications at the Ehrenberg Compressor Station and the adjacent El Paso Meter Station to allow for northbound flow of gas would take place within the existing fencelines of the facilities.

The addition of a pig launcher and receiver at Rannells Trap would require an expansion of the facility by 0.3 acre on private land during both construction and operation. The modifications and additional pig launcher and receiver at the Ogilby Meter Station would require an expansion of the facility by 0.2 acre for both construction and operation. This expansion would affect anthropogenic land managed by the BLM.

TABLE 4.8.2-4

Aboveground Facilities Associated with the North Baja Pipeline Expansion Project

Facility	Approx. Milepost	Existing Land Use	Land Affected During Construction (acres)	Land Affected During Operation (acres)
B-Line				
Ehrenberg Compressor Station Modifications and Pig Receiver ^a	0.0	Anthropogenic (Industrial/ Commercial/Utility)	0.7	0.0
El Paso Meter Station Modifications ^a	0.0	Anthropogenic (Industrial/ Commercial/Utility)	0.0	0.0
Rannells Trap Pig Launcher and Receiver	11.7	Open Land	0.3	0.3
Valve #1 ^b	0.0	Anthropogenic (Industrial/ Commercial/Utility)	0.0	0.0
Valve #2	5.7	Anthropogenic (Industrial/ Commercial/Utility)	0.3	0.01
Valve #3 ^c	11.7	Open Land	0.0	0.0
Valve #4 ^c	11.7	Open Land	0.0	0.0
Valve #5	28.0	Open Land	0.3	0.0
Valve #6	41.6	Open Land	0.3	0.0
Valve #7	60.3	Open Land	0.3	0.0
Valve #8 ^d	75.2	Anthropogenic (Industrial/ Commercial/Utility)	0.0	0.0
Valve #9 ^d	75.2	Anthropogenic (Industrial/ Commercial/Utility)	0.0	0.0
Ogilby Meter Station Modifications, and Pig Launcher and Receiver	75.2	Anthropogenic (Industrial/ Commercial/Utility)	0.2	0.2
<i>B-Line Subtotal</i>			2.3	0.5
Arrowhead Extension				
Two Taps at the A-Line and B-Line, Crossover Piping, and Pig Launcher	0.0	Agricultural	1.0	0.8
Blythe-Arrowhead Meter Station and Pig Receiver	2.1	Anthropogenic (Industrial/ Commercial/Utility)	1.0	0.3
<i>Arrowhead Extension Subtotal</i>			2.0	1.1
IID Lateral				
Tap at B-Line and Pig Launcher	0.0	Open Land	0.2	0.2
Valve #1 ^e	0.0	Open Land	0.0	0.0
Valve #2	7.6	Open Land	<0.1	0.0
Valve #3	27.2	Open Land	<0.1	0.0
Valve #4	38.7	Agricultural	<0.1	0.0
El Centro Meter Station and Pig Receiver	45.7	Anthropogenic (Industrial/ Commercial/Utility)	2.5	0.2
<i>IID Lateral Subtotal</i>			2.9	0.4
Project Total			7.2	2.0

^a Modifications at the Ehrenberg Compressor Station and the adjacent El Paso Meter Station would take place within the existing fencelines of these facilities; however, a header pipe associated with the new pig receiver would be outside of the fenceline of the facility and would require 0.7 acre for construction.

^b This facility would be collocated with the Ehrenberg Compressor Station and would not require any additional land during construction and operation.

^c This facility would be collocated with Rannells Trap and would not require any additional land during construction and operation.

^d This facility would be collocated with the Ogilby Meter Station and would not require any additional land during construction and operation.

^e This facility would be collocated with the tap at the B-Line and would not require any additional land during construction and operation.

Note: The totals shown in this table may not equal the sum of addends due to rounding.

Four new valves associated with the B-Line would be collocated with existing valves along the A-Line and would require an expansion of the existing 50-foot by 50-foot sites to 75-foot by 150-foot sites during construction. A total of about 1.0 acre of open and anthropogenic land would be affected by construction of these facilities. No new permanent right-of-way would be required for the new valves, except for valve #2 along 18th Avenue. This valve would require a 12-foot by 24-foot expansion of the existing fenced site, which would affect privately owned anthropogenic land. The other five valves would be within the sites of the Ehrenberg Compressor Station, Rannells Trap, and Ogilby Meter Station and would not require any additional land for construction or operation.

The taps, crossover piping, and pig launcher associated with the Arrowhead Extension would require a 150-foot by 225-foot site on private land on the northeast corner of the intersection of 18th Avenue and Arrowhead Boulevard. A total of 1.0 acre and 0.8 acre of agricultural land would be required for construction and operation, respectively. A 115-foot by 110-foot site within the fenced yard of SoCalGas' existing Blythe Compressor Station would be required for operation of the proposed Blythe-Arrowhead Meter Station and pig receiver. A total of 1.0 acre and 0.3 acre of anthropogenic land would be required for construction and operation, respectively.

The tap at the B-Line and pig launcher for the IID Lateral would require an 80-foot by 100-foot site on BLM land for construction and operation. A total of 0.2 acre of open land would be required for construction and operation of these facilities. The proposed El Centro Meter Station and pig receiver would be installed within the existing fenceline of the El Centro Power Generating Station but would require 2.5 acres of anthropogenic land for construction and would also require North Baja to obtain a 0.2-acre easement from the IID within the generating station yard. One of the four new valves would be collocated with the tap at the B-Line and pig launcher and would not require any additional land for construction or operation. The three remaining valves along the IID Lateral would each require 10-foot by 25-foot fenced sites within North Baja's permanent right-of-way. Two of these valves would be on open land and the third would be on agricultural land (see Table 4.8.2-4). Valve #4 would permanently affect less than 0.1 acre of agricultural land. Because this permanent conversion of agricultural land represents less than 1 percent of the agricultural land in Imperial County, impacts associated with this conversion would be less than significant.

Pipe Storage and Contractor Yards

To support construction activities, North Baja proposes to use four pipe storage and contractor yards on a temporary basis. These yards would temporarily affect about 73.1 acres of land consisting of about 68.1 acres of anthropogenic (i.e., industrial/commercial/utility) land and 5.0 acres of open land.

Access Roads

North Baja proposes to use several existing roads for temporary right-of-way access during construction. These access roads are primarily paved or dirt roads and/or jeep trails that would be graded or otherwise improved as needed to move equipment and materials to the construction right-of-way. An additional 485 feet of new temporary access roads would be required for the Project, of which about 60 feet would be retained as permanent access to the proposed Blythe-Arrowhead Meter Station at the end of the Arrowhead Extension and 160 feet would be retained as permanent access to the proposed tap at the B-Line and pig launcher at the beginning of the IID Lateral. A permanent access road would also be required to proposed valve #2 at MP 7.6 of the IID Lateral, but North Baja would utilize existing roads with some modification and would not need to construct a new road. A total of about 110.9 acres of land would be affected by using these access roads during construction (101.2 acres of open land, 8.4 acres of agricultural land, and 1.3 acres of anthropogenic land). Of the 110.9 acres, about 0.1 acre would be required for operation of the permanent access road to the Blythe-Arrowhead Meter Station and proposed tap at the B-Line and pig launcher at the beginning of the IID Lateral. The locations, conditions, lengths, and acres of the proposed access roads are listed in Table D-2 in Appendix D.

4.8.3 Existing Residences and Planned Developments

4.8.3.1 Existing Residences

Although no residential land would be directly crossed by the proposed pipeline facilities, the adjacent land uses along 18th Avenue on the B-Line, Arrowhead Boulevard on the Arrowhead Extension, and Imperial County roads on the IID Lateral include a mix of rural residential and agricultural land. A total of 24 residences and 2 businesses are along the portion of 18th Avenue that would be affected by construction of the Project. Of the 24 residences, 18 would be within 100 feet of North Baja's proposed construction work area (i.e., construction right-of-way and temporary extra work areas). Both of the businesses along 18th Avenue would also be within 100 feet of the proposed construction work area. There are three residences along the portion of Arrowhead Boulevard that would be affected by construction of the Project; however, no residences or businesses would be located within 100 feet of the Arrowhead Extension. The closest residence, at MP 1.2, is approximately 126 feet from the edge of the construction right-of-way. Along the roadways in Imperial County that would be affected by the proposed IID Lateral, a total of 28 residences and 6 businesses are present. Of these structures, 19 residences and 4 businesses would be within 100 feet of North Baja's proposed construction work area. Table 4.8.3-1 lists the residences within 100 feet of North Baja's proposed construction work area by milepost and indicates the distance and orientation of each from the construction work area. There are no residences within 100 feet of the modified or proposed aboveground facilities.

In residential areas, the two most significant impacts associated with construction and operation of a pipeline are disturbance during construction and encumbrance of property for future uses caused by the easement. This includes the limitation on future permanent structures within the permanent right-of-way. The residences and businesses within 100 feet of the construction work area may experience the effects of construction and operation of the Project. In general, as the distance from the construction work area increases, the impacts on residences decrease. No permanent residences or businesses would be displaced from their established locations as a result of the Project.

Temporary construction impacts on residential areas could include inconvenience caused by noise and dust generated by construction equipment, personnel, and trenching of roads or driveways; ground disturbance of lawns; removal of trees, landscaped shrubs, or other vegetative screening between residences and/or adjacent rights-of-way; potential damage to existing septic systems or wells; disruption of access to the property; and removal of aboveground structures, such as fences, sheds, or trailers, from within the right-of-way.

In general, construction in the 7.6-mile-long paved segment of 18th Avenue in Riverside County, in the Arrowhead Boulevard roadway or road shoulder in Riverside County, and in the various Imperial County roadways would be accomplished using urban construction techniques. All construction activities would be confined to the width of the roadways, including the paved roadway and road shoulders. Excavated materials would be used as a temporary road base for construction traffic to reduce wear on the existing road surface. Through traffic would be routed around segments of road where construction is active; however, North Baja would maintain access to residents, farm workers, and emergency response vehicles throughout the period of construction (estimated to be about 2 weeks in any given location). North Baja has developed Traffic Management Plans for 18th Avenue and Imperial County Roads (see Appendix H). These plans are discussed in further detail in Section 4.10.2 along with the Agency Staffs' recommendation that North Baja develop a Traffic Management Plan for Arrowhead Boulevard.

TABLE 4.8.3-1

Residences and Businesses Within 100 Feet of the Construction Work Area Associated with the North Baja Pipeline Expansion Project

Facility/ Milepost	Residence/ Business	Distance from Edge of Construction Work Area (feet)	Orientation from the Construction Work Area	Site-Specific Plan Number(s) ^a	Feature(s) Potentially Affected	North Baja's Proposed Mitigation Measure(s)
B-Line						
2.92	Residence	6	North	4200-E-SS-101	Driveway, lawn, access, gravity flow irrigation system	Repair driveway, replant lawn, shift stockpiled material, install temporary ditch
3.30	Residence	51	South	4200-E-SS-102	Driveway access	Repair driveway, use stove-pipe construction technique
3.62	Residence	19	South	4200-E-SS-103	Access	Temporary use of PVID canal
3.64	Residence	75	South	4200-E-SS-104	Access	Temporary use of PVID canal
3.72	Residence	86	North	4200-E-SS-105	Driveway, palm trees	Repair driveway, install barrier fencing to protect palm trees, install plate over trench
3.75	Residence	62	North	4200-E-SS-106	Driveway, shrubs, access	Repair driveway, replant shrubs and install barrier fencing to protect others, install plate over trench
3.77	Residence	83	North	4200-E-SS-107	Driveway, mailbox	Repair driveway, replace mailbox, install plate over trench
3.84	Residence	72	North	4200-E-SS-108	Driveway, mailbox	Repair driveway, replace mailbox, install plate over trench
3.92	Residence	60	South	4200-E-SS-110	None	NA
4.23	Business	49	North	4200-E-SS-112	Driveway, mailbox, lawn, access	Repair driveway, replace mailbox, replant lawn, install plate over trench, use stove-pipe construction technique
4.42	Residence	91	North	4200-E-SS-113	Driveway, palm trees, lawn, access	Repair driveway, install barrier fencing to protect trees, replant lawn, install plate over trench, use stove-pipe construction technique
4.64	Residence	40	North	4200-E-SS-114	Driveway, fence, shrubs, access	Repair driveway, replace fence, replant shrubs, install plate over trench, use stove-pipe construction technique
4.93	Residence	76	South	4200-E-SS-115	Driveway, palm trees, lawn, restricted access	Repair driveway, install barrier fencing to protect trees, replant lawn, use stove-pipe construction technique
5.25	Business	49	North	4200-E-SS-116	Driveway, access	Repair driveway, install plate over trench
5.72	Residence	84	South	4200-E-SS-117	Driveway, lawn	Repair driveway, replant lawn
6.38	Residence	52	North	4200-E-SS-120	Driveway, lawn	Repair driveway, replant lawn, install plate over trench, use stove-pipe construction technique

TABLE 4.8.3-1 (cont'd)

Residences and Businesses Within 100 Feet of the Construction Work Area Associated with the North Baja Pipeline Expansion Project

Facility/ Milepost	Residence/ Business	Distance from Edge of Construction Work Area (feet)	Orientation from the Construction Work Area	Site-Specific Plan Number(s) ^a	Feature(s) Potentially Affected	North Baja's Proposed Mitigation Measure(s)
7.66	Residence	84	South	4200-E-SS-121	Lawn, access	Replant lawn, use stove-pipe construction technique
7.91	Residence	74	North	4200-E-SS-122	Driveway, palm trees, shrubs, mailbox, access	Repair driveway, install barrier fencing to protect trees, replant shrubs shift stockpiled material, install plate over trench
8.20	Residence	54	North	4200-E-SS-123	Driveway, trees and shrubs, mailbox, access	Repair driveway, install barrier fencing to protect trees and shrubs, shift stockpiled material, use stove-pipe construction technique
8.66	Residence	70	South	4200-E-SS-124	Shrubs	Replant shrubs
Arrowhead Extension IID Lateral				-None-		
8.90	Residence	79	North	4200-E-SS-201	None	NA
27.84	Residence	71	North	4200-E-SS-202	Gravel driveway	Repair driveway, install plate over trench
27.94	Residence	60	North	4200-E-SS-203	Gravel driveway	Repair driveway, install plate over trench
28.12	Residence	93	North	4200-E-SS-204	Gravel driveway, mailbox	Repair driveway, install plate over trench, replace mailbox
29.54	Residence	80	South	4200-E-SS-205	None	NA
40.40	Business	37	North	4200-E-SS-207	Driveway, fence, trees, mailbox	Repair driveway, install plate over trench, install barrier fencing to protect trees and fence, replace mailbox
40.44	Residence	19	North	4200-E-SS-207	Driveway, tree, fence, trees, mailbox	Repair driveway, install plate over trench, install barrier fencing to protect trees and fence, replace mailbox
41.40	Residence	68	North	4200-E-SS-209	Gravel driveway, mailbox	Repair driveway, install plate over trench, replace mailbox
41.42	Residence	45	West	4200-E-SS-210	None	NA
41.94	Residence	66	West	4200-E-SS-211	None	NA
41.99	Residence	95	West	4200-E-SS-212	None	NA
42.12	Residence	57	West	4200-E-SS-215	None	NA
42.89	Residence	59	Northeast	4200-E-SS-216	Mailbox	Replace mailbox
42.92	Residence	100	North	4200-E-SS-217	Mailbox	Replace mailbox

TABLE 4.8.3-1 (cont'd)

Residences and Businesses Within 100 Feet of the Construction Work Area Associated with the North Baja Pipeline Expansion Project

Facility/ Milepost	Residence/ Business	Distance from Edge of Construction Work Area (feet)	Orientation from the Construction Work Area	Site-Specific Plan Number(s) ^a	Feature(s) Potentially Affected	North Baja's Proposed Mitigation Measure(s)
43.04	Business	58	North	4200-E-SS-218	None	NA
43.72	Business	89	South	4200-E-SS-219	Gravel road, fence, scales and scale house	Repair road, replace fence, install barrier fencing to protect scales and scale house, use stove-pipe construction method
45.24	Residence	76	North	4200-E-SS-220	None	NA
45.26	Residence	88	North	4200-E-SS-221	None	NA
45.30	Residence	70	North	4200-E-SS-222	None	NA
45.32	Business	74	North	4200-E-SS-223	None	NA
45.34	Residence	56	North	4200-E-SS-223	None	NA
45.36	Residence	80	North	4200-E-SS-224	None	NA
45.40	Residence	91	North	4200-E-SS-225	Transmission tower	Install barrier fencing around tower

^a Site-specific plans are in Appendix O.

NA = Not applicable.

North Baja would implement the following general measures to minimize construction-related hazards and maintain access to the residences and businesses that would be affected by the Project:

- minimize the amount of trench left open at the end of the workday and cordon off the trench during non-work hours;
- cover the trench with steel plates where necessary to allow traffic passage and reduce safety hazards;
- install safety fencing for a minimum of 100 feet on either side of residences that are within 100 feet of the construction work area;
- secure and patrol construction areas during non-work hours to minimize safety issues associated with open trenches;
- maintain an emergency ingress and egress near all residences and businesses throughout the construction process;
- maintain at least one lane of restricted traffic movement through the construction area for access to residences and for emergency vehicles;
- minimize noise by maintaining equipment in good operating condition; and
- suppress dust with the use of water trucks and regular spraying.

In addition to the measures identified above, North Baja has prepared and would follow Site-specific Residential Construction Mitigation Plans to minimize disruption and to maintain access to the residences and businesses within 100 feet of the construction work area associated with the B-Line and IID Lateral. The site-specific mitigation measures North Baja would use for each of the features potentially affected at the residences and businesses identified along 18th Avenue and Imperial County roadways are summarized in Table 4.8.3-1. Appendix O contains dimensioned site plans that show the following items within a minimum of 100 feet of the construction work area:

- the proposed centerline of the pipeline;
- the limits of the construction work area;
- the edge of the paved road surface;
- each residence/business and associated structures;
- existing pipelines and powerlines;
- waterbodies, roads, driveways, fences, trees or other landscaping, and private wells; and
- the location of safety fencing that would be installed during construction.

Implementation of North Baja's general mitigation measures as well as its Site-specific Residential Construction Mitigation Plans and Traffic Management Plans would reduce the potential impacts of construction on residences and businesses to less than significant levels.

Because the pipeline facilities in residential areas would be located in county road rights-of-way, which already restrict land use, operation of the pipelines would not have an incremental effect upon residential owners' current land uses or activities and would not cause any long-term property damage. In addition, because the pipelines would be buried, they would not physically divide an established community.

4.8.3.2 Planned Developments

Planned developments within 0.25 mile of the proposed pipeline facilities and associated aboveground facilities were identified through consultations with local planning agencies and landowners and are summarized below. Section 4.15 includes an analysis of potential cumulative effects of these projects when considered in conjunction with the proposed Project. Based on contact with county planning officials and landowners, North Baja is not aware of any planned developments that would affect current land uses near the Arrowhead Extension.

Development plans for the Edgewater Lane Planned Residential Community have been submitted and approved by the City of Blythe. The residential development would be located along Riviera Drive, adjacent to the Colorado River and North Baja's existing pipeline easement for the A-Line. Construction of the development is scheduled to occur in 2007. North Baja has reached an agreement with the developer of the Edgewater Lane Planned Residential Community regarding the mutual compatibility of the proposed pipeline easement across the property and the residential development.

The Imperial County Planning Department has prepared a specific plan for "Felicity," a 2,345-acre master planned community that would be north of Interstate 8 and primarily west of Sidewinder Road (Imperial County 1998). At its nearest point, the existing A-Line and proposed B-Line, as well as the expanded Ogilby Meter Station, would be approximately 2 miles west of the proposed development. Although the specific plan has been approved and adopted by the Imperial County Board of Supervisors, implementation of the Felicity planned community has been put on hold indefinitely (Imperial County 2005).

Although not residential in nature, several other projects have been proposed by various agencies and could be affected by the proposed Project. These projects include the All-American Canal Lining Project, the Drop 2 Storage Reservoir Project, and the USCIS Border Fence.

The IID has issued plans to line 23 miles of the 82-mile-long All-American Canal to prevent the continual seepage that has been occurring since the canal originally started delivering water to Imperial Valley in 1940. The final EIS for the project was issued in 1997; however, a scheduled start date for the project has not yet been established. The IID Lateral would be constructed in the same vicinity as the lining project between MPs 2.3 and 7.9. North Baja has consulted with the IID on the location of the two projects to avoid locational conflicts and would continue to coordinate with the IID as both projects move forward. Details on alternatives evaluated in this area are presented in Section 3.2.3.2.

The BOR has proposed a water storage reservoir at the former Brock Research Station, referred to as the Drop 2 Storage Reservoir Project. A new canal would extend eastward from the reservoir. The alignment of the new canal would either be just north of Evan Hewes Highway or in the center of the highway itself (the highway would be removed). The proposed IID Lateral alignment would be just south of the current paved roadway but it may be moved to an alignment just north of the highway if the new canal is built where Evan Hewes Highway now lies (see Section 3.2.4.1). North Baja has consulted with the BOR to avoid conflicts and would continue to coordinate with the BOR as both projects move forward.

The U.S. Congress is considering a bill to authorize construction of a fence along the entire U.S.-Mexico border to assist in homeland security and border control issues. Currently the USCIS only maintains a 15-mile-long border fence in the San Diego area. There are no definitive plans for constructing a border fence along the border at MP 79.8 where the B-Line crosses from the United States into Mexico or along the IID Lateral where it is closest to the border between MPs 7.9 and 16.0.

Because North Baja would continue to work with the developers and applicable agencies associated with these projects to ensure that the proposed Project does not conflict with the development plans, impacts on these areas are expected to be less than significant.

4.8.4 Special Management Areas

4.8.4.1 California Desert Conservation Area

Approximately 64.4 miles (81 percent) of the B-Line route in California are within the CDCA (MPs 3.5 to 22.3 and MPs 34.2 to 79.8). The entire 2.1 miles of the Arrowhead Extension and 45.7 miles of the IID Lateral route are within the CDCA. Pursuant to the FLPMA, the BLM prepared a comprehensive land use management plan for the area (the CDCA Plan) in 1980. The intent of the CDCA Plan is to "...provide for the immediate and future protection and administration of the public lands in the California Desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality" (BLM 1980). Figure 4.8.4-1 shows the location of the CDCA boundary in relation to BLM land and the proposed pipeline routes.

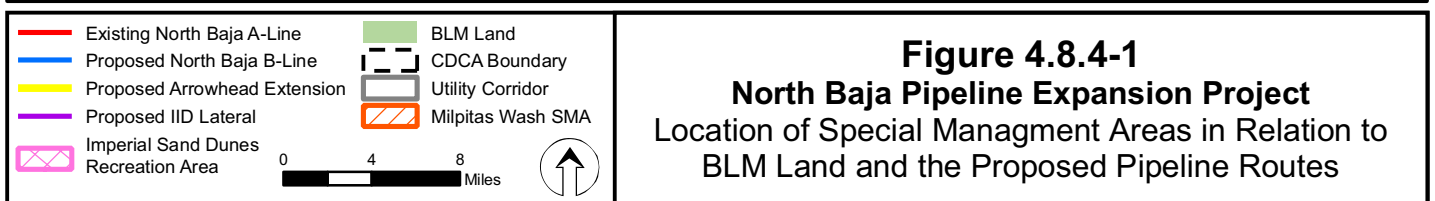
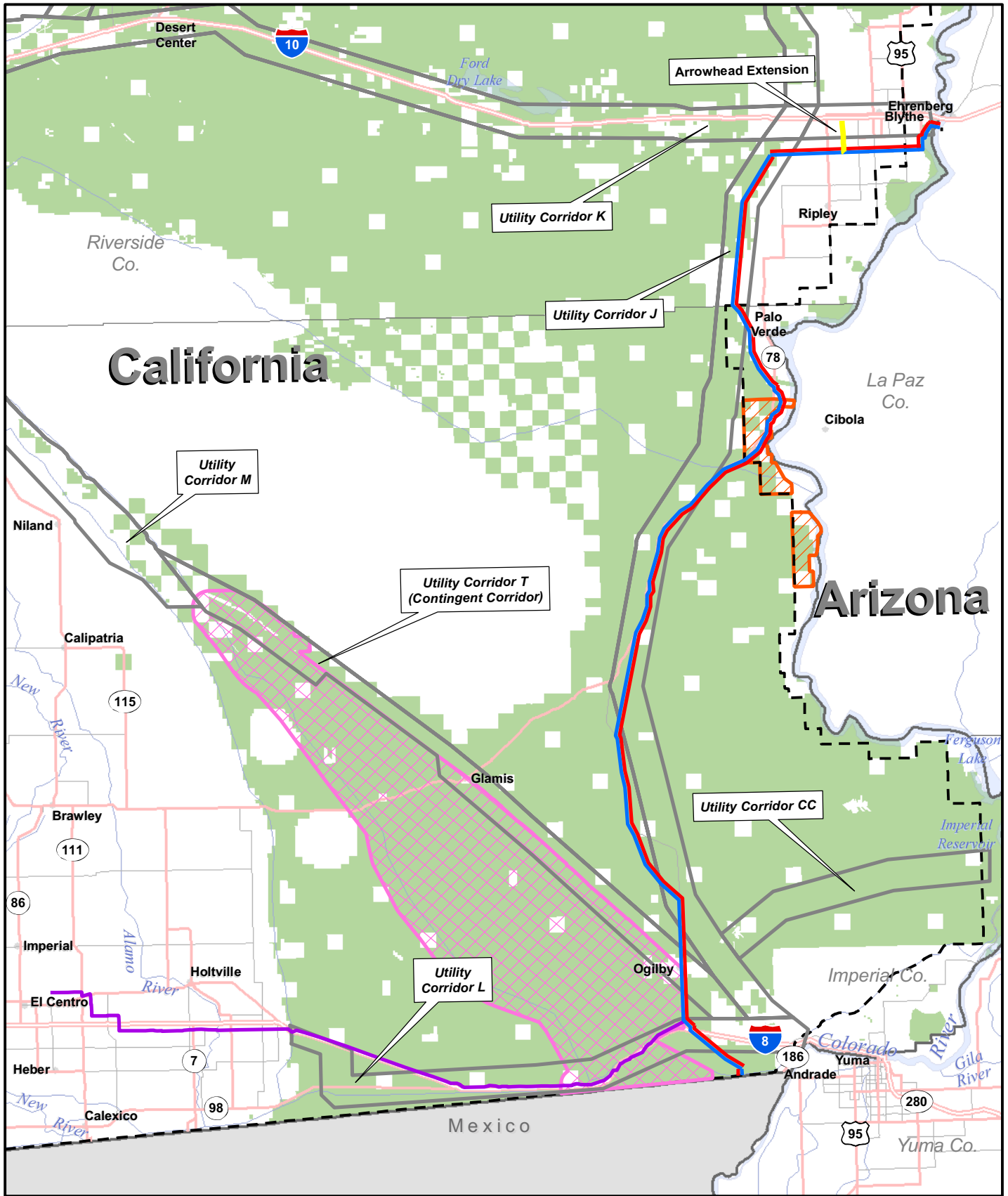
None of the 2.1 miles associated with the Arrowhead Extension would cross BLM-managed land within the CDCA. About 50.7 miles of the B-Line and 25.7 miles³ of the IID Lateral within the CDCA are managed by the BLM (see Figure 4.8.4-1). All of the public lands within the CDCA under BLM management have been designated geographically into four MUCs (BLM 1980): Controlled Use ("C"), Limited Use ("L"), Moderate Use ("M"), and Intensive Use ("I"). Along the proposed B-Line route MUCs "L" (25.2 miles) and "M" (25.5 miles) would be crossed. Along the proposed IID Lateral route MUCs "L" (20.8 miles) and "I" (4.9 miles) would be crossed. The CDCA Plan stipulates that new gas transmission facilities located in MUCs "L," "M," and "I" lands may be allowed only within designated corridors.

Under the Energy Production and Utility Corridors Element of the CDCA Plan, 16 planning corridors were identified to address utility facilities, including all pipelines with diameters greater than 12 inches (BLM 1980). Eight additional corridors are currently identified as contingent corridors. Approximately 35.1 miles of the B-Line route within the CDCA would be within designated Utility Corridors J and L, of which 29.9 miles are managed by the BLM (see Figure 4.8.4-1). Utility Corridor J is a 2-mile-wide corridor that runs north-south through the southeastern portion of California. The B-Line is within Utility Corridor J between MPs 10.8 and 22.3, MPs 36.5 and 53.8, and MPs 65.2 and 68.3. Between MPs 74.3 and 77.4, the proposed B-Line crosses Utility Corridor L, which is an east-west running corridor along Interstate 8.

Approximately 20.4 miles of the IID Lateral route within the CDCA would be within designated Utility Corridor L, of which 18.9 miles are managed by the BLM (see Figure 4.8.4-1). The IID Lateral is within Utility Corridor L between MPs 0.0 and 18.9 and MPs 26.0 and 27.5.

All other portions of the proposed B-Line and IID Lateral within the CDCA would be outside a designated utility corridor. The portions of the proposed route that are on lands within the CDCA and managed by the BLM but outside a designated utility corridor (approximately 20.8 miles for the B-Line and 6.8 miles for the IID Lateral) are in conflict with the CDCA Plan and would require an amendment to the plan.

³ Of this total, about 17.6 miles would be located within county road rights-of-way across BLM land.



Although approximately 20.8 miles of the proposed B-Line on BLM lands are in conflict with the CDCA Plan because they are outside of a designated utility corridor, approximately 1.5 miles of the 20.8 miles are within a contingent utility corridor. Between MPs 69.7 and 72.5, the proposed B-Line bisects Utility Corridor T, which runs in a general northwest to southeast direction adjacent to the Southern Pacific Railroad (see Figure 4.8.4-1). The CDCA Plan identifies this corridor as a contingent utility corridor having some potential for use in the future (BLM 1980). A contingent utility corridor is not an officially designated utility corridor until a plan amendment for the use of the corridor is approved. While this portion of the proposed route would still require a plan amendment, it would be within a utility corridor that has been identified for future potential use.

Although the proposed Project is not consistent with the current CDCA Plan, it would be consistent with previous projects and the goal of grouping similar land uses. The proposed B-Line would be entirely adjacent to North Baja's existing A-Line, which was the subject of an amendment to the CDCA Plan and previously approved by the BLM in 2002. In addition, the portion of the IID Lateral route outside of designated utility corridors would be within or adjacent to existing transportation (Interstate 8 and Imperial County roadways) and transmission line rights-of-way.

North Baja submitted an amended Right-of-Way Grant application to the BLM in May 2005 and would need to receive the BLM's approval in order to locate the pipeline facilities on BLM lands. It would also be the BLM's responsibility to amend the CDCA Plan (see Section 1.7). The plan amendment would avoid conflict with the CDCA Plan and would, therefore, not be a significant impact. The amendment would only accommodate the North Baja Pipeline Expansion Project and would not create a new corridor or modify existing corridors.

4.8.4.2 Milpitas Wash Special Management Area

The proposed B-Line crosses the Milpitas Wash SMA generally between MPs 29.4 and 34.2, crossing approximately 4.4 miles of BLM managed land (see Figure 4.8.4-1). The Milpitas Wash SMA is managed by the BLM Yuma Field Office under the Yuma District Plan. The purpose of the Yuma District Plan is to provide a comprehensive framework for managing public land and resources in the Yuma District. The Yuma District Plan adopted the preferred alternative analyzed during an EIS process addressing six major issues and concerns identified by the public, other agencies, and BLM staff. The six issues included wildlife habitat, special management areas, grazing, land ownership adjustment, rights-of-way, and recreation. The theme of the preferred alternative adopted by the Yuma District Plan is to "balance competing demands by providing for development of needed resources while protecting important and sensitive environmental values" (BLM 1985). As part of the Yuma District Plan, several areas were identified to be managed under special management prescriptions, including the Milpitas Wash SMA. The Milpitas Wash SMA was designated for its natural values, which include undisturbed desert vegetation, wildlife habitat, and cultural resources. The Yuma District Plan prohibits new utilities or rights-of-way across the Milpitas Wash SMA.

Of the approximately 4.4 miles crossed by the proposed B-Line within the Milpitas Wash SMA, 2.5 miles are managed by the BLM. Allowing construction of the proposed B-Line across these 2.5 miles would require an amendment to the Yuma District Plan.

This EIS/EIR proposes to modify the land use plan decisions to the extent needed to allow the BLM to issue North Baja a permit to cross the Milpitas Wash SMA. The Yuma District is currently in the process of revising its plan and is considering a proposal that would reroute the utility corridor to follow SR 78. The revision to the Yuma District Plan is a separate action from the proposed North Baja Pipeline Expansion Project. On December 15, 2006, the EPA published a Notice of Availability of the *Yuma Field Office Draft Resource Management Plan and Draft Environmental Impact Statement* in the Federal

Register.⁴ Because the B-Line would be within this new utility corridor, adoption of this revision would eliminate the need for a plan amendment for the proposed North Baja Pipeline Expansion Project. The revised plan, however, is not expected to be completed before the environmental review process for the proposed Project is completed. Therefore, for the North Baja Pipeline Expansion Project, this EIS/EIR will be used by the BLM to consider amending the current Yuma District Plan.

Although the B-Line deviates from designated utility corridors within the Milpitas Wash SMA, it would be collocated with North Baja's existing A-Line. The BLM approved an amendment to the Yuma District Plan to accommodate this pipeline in 2002. North Baja submitted an amended Right-of-Way Grant application to the BLM in May 2005 and would need to receive the BLM's approval to locate the B-Line on BLM lands. It would also be the BLM's responsibility to amend the Yuma District Plan to accommodate the B-Line (see Section 1.7). The plan amendment would avoid conflict with the Yuma District Plan and would, therefore, not be a significant impact. The amendment would only accommodate the North Baja Pipeline Expansion Project and would not create a new corridor or modify existing corridors.

4.8.4.3 Imperial Sand Dunes Recreation Area

The ISDRA was created in 1977 for the purpose of providing a formal space for OHV use (Congressional Resources Committee 2005). The ISDRA covers 248 square miles, with a length of more than 40 miles and an average width of about 5 miles (see Figure 4.8.4-1). The ISDRA is managed by the BLM El Centro Field Office and is a popular OHV use area. OHV recreation in the dunes became an important recreational activity in the post-World War II era with the availability of surplus U.S. Army Jeeps (BLM 2003). The ISDRA typically hosts 1.4 million OHV visitors per year, mostly between the months of September and May, when the weather is cooler (summer dunes temperatures reach well past 110 °F). Camping (with recreational vehicles or vacation trailers) and sightseeing are also popular activities in this area.

The ISDRA is divided into eight management areas, of which six are open to OHV use. The two management areas not open to OHV use are the North Algodones Dunes Wilderness, which is completely closed to motorized traffic, and the Adaptive Management Area, where limited use has been established while monitoring is taking place. The management areas that are open to OHV use include: Mammoth Wash, Ogilby, Glamis, Gecko, Dune Buggy Flats, and Buttercup (BLM 2003). The Gecko and Buttercup Management Areas have formal campgrounds; these include pit toilets, some paved driving surfaces, and signage. The B-Line would cross the Ogilby Management Area between MPs 71.1 and 74.5. The IID Lateral would cross the Ogilby Management Area between MPs 0.0 and 2.3 and the Buttercup Management Area between MPs 2.3 and 7.9.

The Ogilby Management Area is designated MUC "M" by the ISDRA Plan and is popular with families and groups that enjoy OHV use away from intensively used areas in the ISDRA. The Buttercup Management Area is designated MUC "I" by the ISDRA Plan and is used for camping, sightseeing, commercial vending, education, filming, and rights-of-way.

Between MPs 71.1 and 74.5, the B-Line would be within North Baja's existing right-of-way associated with the A-Line and would also be adjacent to Ogilby Road, which marks the eastern edge of the ISDRA and the Ogilby Management Area. This portion of the route is in an area of lighter OHV use and away from any developed recreational facilities. As a result, the B-Line is not expected to have a significant impact on this area and agencies have not expressed concern about this portion of the Project.

⁴ The Yuma Field Office Draft Resource Management Plan and Draft Environmental Impact Statement is available for viewing on the Internet at <http://www.blm.gov/az/LUP/planning.htm> or at the Yuma Field Office.

However, agencies have expressed concern about locating the IID Lateral through the more heavily used portions of the ISDRA.

North Baja selected the proposed IID Lateral route based on an evaluation of alternative routes and in consultation with the BOR, the IID, the BLM, and the members of the ISDRA Technical Review Team. Alternatives that were considered for the route through this area are discussed in Section 3.2.3.2. The location of the proposed route alignment accounts for concerns that arose during consultation meetings.

The eastern end of the proposed IID Lateral (west of the All-American Canal and Interstate 8) would be adjacent to an existing 500-kilovolt (kV) transmission line from MPs 0.1 to 2.3. This portion of the route is in the Ogilby Management Area in an area of lighter OHV use and away from any developed recreational facilities. Between MPs 2.3 and 2.6, the pipeline would be installed beneath Interstate 8 and the All-American Canal using the HDD method. From MP 2.6, the alignment continues west adjacent to the CalTrans right-of-way associated with Interstate 8 as well as existing transmission lines for 3.1 miles to MP 5.7. In this segment the route traverses the northern edge of the Buttercup Campground, avoiding the main parking and vendor area by staying close to the CalTrans right-of-way. This alignment was suggested by the ISDRA Technical Review Team. North Baja made other alignment adjustments in this stretch at the suggestion of the BLM, with the goal of avoiding the most intensively used areas.

At MP 5.7, the IID Lateral would cross Interstate 8 to an area between the freeway and the All-American Canal where there is no access for OHV users. The IID Lateral would cross this area between MPs 5.7 and 7.9, adjacent to an area that would be used by the IID for its All-American Canal Lining Project (see Section 4.8.3.2). The IID Lateral would be installed beneath the All-American Canal (and exit the ISDRA) at MP 7.9. A valve would be located at MP 7.6 in an area between the Interstate 8 right-of-way and the All-American Canal, which is closed to OHV activity.

Peak OHV use season in the ISDRA is from Labor Day to Easter, and is especially high in November and December. This prompted a suggestion from BLM recreation planners and the ISDRA Technical Review Team that construction of the IID Lateral take place during the summer months to avoid conflict with the high-use recreational season (BLM 2005). North Baja has incorporated this suggestion into its proposed construction schedule (see Section 2.4). The ISDRA Technical Review Team also raised concerns that various recreational activities might conflict with the pipeline if it was buried at standard depths. In response to these concerns, North Baja would bury the IID Lateral to ensure 6 feet of cover (3 feet more than typical pipeline depths) between MPs 2.7 and 5.7.

During construction, the work area within the ISDRA would be fenced to prevent recreational users from entering the construction area. This would result in a short-term restriction on recreational use in the area. Because it would be short term (i.e., considerably less than 1 year) and would occur during the summer months when use of the area is at its lowest, this impact would not be considered significant. Once the IID Lateral has been installed, surface contours would be re-established and the pipeline right-of-way would not be restricted for OHV use. As a result, no significant impacts on recreational use would occur during normal pipeline operations. Short-term recreational impacts could result from operation and maintenance activities if North Baja needed to perform major maintenance work, such as pipeline repairs; however, such major work would be rare and, if needed, would be completed in less than 1 year so no significant impacts would occur. Routine maintenance at the valve at MP 7.6 would occur inside the fenced valve site and would not affect recreational use.

4.8.5 Recreation and Public Interest Areas

The proposed pipeline facilities would not cross any national or State forests, National or California Wild and Scenic Rivers, registered national natural landmarks, lands designated under a Habitat Conservation Plan, golf courses, or areas designated under the National Trails System. However, the B-Line and IID Lateral would cross 11 recreation or public interest areas and be adjacent to several others. Table 4.8.5-1 lists the locations and crossing length (if applicable) for each of these areas. A more detailed discussion of each area is provided below. The Arrowhead Extension would not cross or be adjacent to any recreation or public interest areas. Schools in the Project area are discussed in Section 4.9.4.

TABLE 4.8.5-1 Recreation and Public Interest Areas Crossed by or Adjacent to the North Baja Pipeline Expansion Project			
Facility	Milepost Location	Name of Area	Crossing Length
B-Line	0.0	Ehrenberg Sandbowl Off-Highway Vehicle (OHV) Area	NA – 1.0 mile southeast
	0.1	Colorado River access area	NA – 0.1 mile south
	0.2	Colorado River	768 feet
	15.7	Mule Mountains Area of Critical Environmental Concern (ACEC)	NA – 0.9 mile west
	18.3	Bradshaw Trail	50 feet
	19.2-22.3	Metropolitan Water District Property	3.1 miles
	25.0	Palo Verde Mountains County Park	NA – 1.3 miles east
	25.5	Oxbow Recreation Site	NA – 1.1 miles east
	29.2-29.6	Bureau of Reclamation quarry	NA – 0.1 mile west
	31.0	Palo Verde Wilderness Area	NA – 1.0 mile west
	29.9-32.3 ^a	Cibola National Wildlife Refuge	1.2 miles
	35.2-50.0	Wildlife Habitat Management Area	14.8 miles
	49.0	Indian Pass Wilderness Area	NA – 1.9 miles east
	66.5	Tumco Mine Area Landmark	NA – 1.2 miles east
	71.1-74.5	Imperial Sand Dunes Recreation Area (ISDRA), Ogilby Management Area	3.4 miles
	79.6	Pilot Knob ACEC	NA - 1.0 mile east
Arrowhead Extension		-None-	
IID Lateral	0.0-2.3	ISDRA, Ogilby Management Area	2.3 miles
	2.3-4.3	Plank Road ACEC	NA – 0.1 mile southeast
	4.9-5.6	Plank Road ACEC	0.7 mile
	6.8	Plank Road Interpretive Site	NA – 0.1 mile southeast
	2.3-7.9	ISDRA, Buttercup Management Area	5.6 miles
	13.7-18.7	East Mesa ACEC	5.0 miles
	13.7-21.1	East Mesa Flat-tailed Horned Lizard Management Area	7.4 miles
	27.4	Hot Springs Long Term Visitor Area	NA – 0.1 mile north
	27.3-27.6	Lake Cahuilla ACEC	0.3 mile
^a The B-Line would cross the Cibola National Wildlife Refuge intermittently between MPs 29.9 and 32.3 for a total of 1.2 miles. Specifically, the B-Line would cross the Cibola National Wildlife Refuge between MPs 29.9-30.0, 30.3-30.4, 30.7-30.8, 30.9-31.3, and 31.8-32.3. NA = Not applicable.			

One of the primary concerns when crossing recreation and public interest areas is the impact of construction on the purpose for which the area was established (e.g., the recreational activities, public access, and resources the area aims to protect). Construction would alter visual aesthetics by removing existing vegetation and disturbing soils. Construction would also generate dust and noise, which could be a nuisance to recreational users. Construction could also interfere with or diminish the quality of the recreational experience by affecting wildlife movements or disturbing trails. In general, impacts on recreational and public interest areas would be temporary and would be limited to the period of active construction, which typically would last only several days to several weeks in any one area.

In general, North Baja would minimize construction-related impacts on these areas by:

- installing the B-Line entirely within the existing right-of-way maintained for the A-Line;
- installing the IID Lateral almost entirely within or adjacent to existing road and transmission line rights-of-way;
- timing construction to avoid peak usage periods, when practical; and
- ensuring effective post-construction reclamation of the right-of-way to preconstruction conditions.

Off-Highway Areas and Use

OHV use in the Project area is variable in terms of both season and location. OHV use occurs most frequently during the winter months with the heaviest use occurring on the weekends. The Ehrenberg Sandbowl OHV Area is 1.0 mile southeast of the Ehrenberg Compressor Station site. Further south, along the terminus of the proposed B-Line and along the beginning of the proposed IID Lateral, the ISDRA provides a large area of OHV use (see Section 4.8.4.3). In addition, OHV use is common but regulated on BLM lands outside of these areas and along the routes of the B-Line and IID Lateral.

BLM land within the CDCA is designated open, closed, or limited for vehicle use. Route designations are generally made on the basis of MUCs. MUC “M” (approximately 25.5 miles of the B-Line), MUC “L” (approximately 25.2 miles of the B-Line and 20.8 miles of the IID Lateral), and MUC “I” (approximately 4.9 miles of the IID Lateral) fall under the limited vehicle use designation. Limited vehicle access means that motorized-vehicle access is allowed only on certain routes of travel, which include roads, trails, and washes (BLM 1980). At a minimum, use is restricted to existing routes of travel. An existing route of travel is a route that was established before approval of the CDCA Plan in 1980 with a minimum width of 2 feet, showing significant surface evidence of prior vehicle use or, for washes, history of prior use. On MUC “M” lands, access is allowed on existing routes unless it is determined that use on specific routes must be limited further. On MUC “L” lands, vehicle access is directed toward use of approved routes of travel due to higher levels of resource sensitivity in this MUC. On MUC “I” lands, those areas not designated as open are limited to existing routes.

During construction, the Project could have an impact on OHV areas and users by restricting access to areas designated for OHV use. Conversely, the pipeline rights-of-way could increase accessibility for OHV use into previously inaccessible, environmentally sensitive areas. To reduce the potential for interference between pipeline construction activities and authorized OHV use, as well as unauthorized OHV use of the pipeline rights-of-way after construction, North Baja developed an Off-Highway Vehicle Management Plan (OHV Plan) that addresses the initial siting, construction, and operation of the proposed facilities. North Baja’s OHV Plan was developed in consultation with BLM recreation specialists and biologists in 2001 and 2002 during planning for the original North Baja Pipeline

Project and again in 2005 during planning for the proposed Project. The OHV Plan is also based on experience North Baja has gained while operating, maintaining, and managing the A-Line right-of-way since 2002. The OHV Plan is provided in Appendix P.

In the area that would be crossed by the B-Line, OHV use is permitted only on BLM-designated routes of travel except between MPs 71.1 and 74.5 (see Section 4.8.4.3). Before construction, North Baja would clearly mark the extent of the construction work area. Where active construction is underway, the right-of-way would be occupied by workers and equipment and restricted for OHV use. OHV users would be directed back to designated routes of travel. Additional measures North Baja would implement to minimize construction-related impacts on OHV users in the ISDRA are discussed in Section 4.8.4.3. Because any impacts associated with restricted OHV use would be short term (i.e., considerably less than 1 year), they would not be considered significant.

Where the proposed pipelines would be in areas of authorized OHV use, the pipeline rights-of-way would not be restricted for OHV use. However, to minimize the potential for the pipeline rights-of-way to increase accessibility for OHV use into previously inaccessible, environmentally sensitive areas, North Baja would implement various blocking measures where it has been determined that such measures may be effective in discouraging OHV use. These measures are described below.

- Berms would be placed across the right-of-way where it intersects an existing OHV road. Berm slopes would not exceed 30 percent.
- Berms would be placed across the right-of-way as part of erosion control and strategically placed to reduce visibility and mimic local topography.
- Rock redistribution and strategic placement, without making it into a challenging obstacle course, would occur across the right-of-way where large rock is available and such work would “erase” the visual cues of “road.”
- The right-of-way would be backbladed or raked by bulldozer or by hand, to erase the traces of the intersection of the right-of-way with an existing OHV route or dirt road.
- Ocotillo and large cacti would be salvaged and replanted where they are available with the understanding that survival criteria would not be applied because even dead specimens provide convincing visual clues of “no road.”
- Other desert species, including creosote bush scrub and desert wash woodland species (e.g., palo verde, ironwood, smoke tree, etc.) would also be salvaged and replanted with the understanding that they would be unlikely to survive but could still provide value as a visual block.
- Woody material removed during construction would be redistributed across the right-of-way to both disguise the right-of-way and serve as “vertical mulch.”

An assessment and detailed description of where these blocking measures would be implemented is presented in the OHV Plan (see Appendix P).

The Yuma District of the BLM commented that it would like North Baja to place additional signs and vegetative barriers at access points along the right-of-way to prohibit OHV use. North Baja has agreed to place signs and/or vegetative barriers at access points along the right-of-way if requested by the Yuma District.

A scoping comment was received regarding OHV management within or near the Cibola NWR. North Baja met with the manager of the Cibola NWR to review the effects of construction of the A-Line within the refuge and to determine the appropriate OHV management measures to be considered for the proposed B-Line. The refuge manager recommended that North Baja replace fencing originally installed after construction of the A-Line but subsequently destroyed by OHV users. It was also suggested that North Baja maintain the fence for 2 years because in remote parts of the refuge, it takes 2 years for fencing to become an effective OHV barrier. North Baja has agreed to install and maintain the fencing for 2 years along this portion of the B-Line.

A scoping comment was also received regarding OHV management on the Nowell property near Riviera Drive at approximately MP 0.4 of the B-Line. After construction of the A-Line, an earthen berm was installed across North Baja's right-of-way on the western edge of Riviera Drive to discourage OHV users from gaining access to other parts of the property from that location. North Baja states that the berm proved effective in discouraging access down the right-of-way from this location; however, OHV traffic originating from other locations has been relatively heavy on North Baja's and the adjacent SoCalGas rights-of-way. According to North Baja, this appears to be a continuation of an OHV use pattern established before its right-of-way was created. North Baja proposes to reconstruct the earthen berm at Riviera Drive after construction of the B-Line and, with the property owner's concurrence, would leave the right-of-way with a rougher surface instead of the smooth finished grade that matches the adjacent ground surface. This could make the right-of-way less attractive as a travel way. North Baja would also offer to procure and install signs for the property owner, should he choose to attempt to discourage OHV access at the main entry points on the property (unrelated to the pipeline right-of-way).

In comments on the draft EIS/EIR, the EPA and the ICAPCD expressed concern about the generation of fugitive dust emissions associated with OHV use of the right-of-way. These agencies also commented that North Baja's OHV Plan did not address enforcement and future monitoring of the proposed OHV blocking measures. Therefore, **the Agency Staffs recommend that:**

- **North Baja shall revise its OHV Plan to include:**
 - a. **the agency or agencies responsible for enforcement of the OHV Plan;**
 - b. **the frequency of monitoring that would be conducted to ensure that the implemented OHV blocking measures are functioning properly;**
 - c. **the methodology for reassessing the implemented OHV blocking measures in the future; and**
 - d. **enforcement measures.**

North Baja shall file the revised OHV Plan with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC before construction of Phase I-A and Phase II.

Implementation of North Baja's proposed measures as well as the Agency Staffs' recommendation would reduce the potential impacts associated with unauthorized OHV use of the right-of-way to less than significant levels.

Colorado River and Access

The proposed B-Line would cross the Colorado River at MP 0.2, and an access area to the river is 0.1 mile south of the Ehrenberg Compressor Station. The Colorado River is an area of high recreational use, including boating and fishing. The Colorado River would be crossed using the HDD method, which would minimize impacts on the river and would not limit the use of the river for recreational purposes. However, access to the river may be restricted during welding of the pipe and the pullback for the HDD crossing. The period of limited public access would be short term (i.e., considerably less than 1 year) and would, therefore, not result in any significant impacts on this area.

Areas of Critical Environmental Concern

The FLPMA defines an ACEC as an area within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. According to the CDCA Plan, the ACEC designation is a process for determining what special management certain important environmental resources or hazards require.

The B-Line would be within 1 mile of two BLM-designated ACECs. The Mule Mountains ACEC is about 0.9 mile west of MP 15.7 and the Pilot Knob ACEC is about 1.0 mile east of MP 79.6. The management objective of both these ACECs is to protect cultural resources. Because these areas would not be crossed by the B-Line, the designated use of these areas would not be affected by the Project and no impacts are anticipated. A detailed discussion of cultural resources potentially affected by the proposed Project is presented in Section 4.11.

The IID Lateral would cross three ACECs: Plank Road, East Mesa, and Lake Cahuilla. The IID Lateral would be within 0.1 mile of the Plank Road ACEC between MPs 2.3 and 4.3 and would cross this ACEC between MPs 4.9 and 5.6. The IID Lateral would cross the Lake Cahuilla ACEC between MPs 27.3 and 27.6. Both of these ACECs are managed to protect cultural resources. Almost all of the route in these locations would be in a designated utility corridor and, therefore, consistent with the designated use of the area. As a result, impacts on these areas would be less than significant. A detailed discussion of cultural resources potentially affected by the proposed Project is presented in Section 4.11.

The IID Lateral would also cross the East Mesa ACEC between MPs 13.7 and 18.7. In 2003, the effective function of the ACEC was replaced by the adoption of a plan amendment providing for a range-wide management strategy for this species within the East Mesa Flat-tailed Horned Lizard Management Area crossed by the IID Lateral between MPs 13.7 and 21.1. The IID Lateral would be at the extreme southern boundary of the area within Imperial County road rights-of-way. Additional information on the flat-tailed horned lizard, including mitigation measures North Baja would implement to minimize impacts on this species, is presented in Section 4.7.6.13.

Designated Trails

At MP 18.3 the proposed B-Line would cross the Bradshaw Trail. The Bradshaw Trail is a BLM-designated Back-Country Byway. Back-Country Byways are a network of low-standard roads and trails or “adventure routes” that are designated as such by the BLM because they cross public lands with high scenic or public interest value. Between 1862 and 1877, the Bradshaw Trail was used to transport miners and supplies to the gold mines of La Paz (now Ehrenberg), Arizona. The trail was also used as a stagecoach route and was the first road through Riverside County. The existing 70-mile-long section of this dirt road extends from the North Shore area near the Salton Sea to within 14 miles of the City of

Blythe. The Bradshaw Trail is periodically graded by the Riverside County Transportation Department. The land at the location of the proposed pipeline crossing is managed by the BLM.

The effects of pipeline construction across the Bradshaw Trail could include restricted or temporary loss of use to the public. To mitigate the impacts of construction on public use of the Bradshaw Trail, North Baja proposes to perform construction activities during off-peak periods and to complete pipeline installation across the trail in just a few days. No adverse impacts on use of the trail are known to have occurred during construction of the A-Line, and minimal impact is expected to occur during construction of the B-Line. Because the period of limited public access would be short term (i.e., considerably less than 1 year), impacts on Bradshaw Trail would be less than significant. No other designated trails would be crossed by the proposed Project.

Metropolitan Water District Property

North Baja's existing A-Line crosses about 3.1 miles of undeveloped desert property owned by the MWD between MPs 19.2 and 22.3. North Baja has stated that it is unaware of any development plans for the property. North Baja's existing right-of-way agreement with the MWD allows placement of a second pipeline within the 50-foot-wide easement. The right-of-way agreement also stipulates certain terms such as restoration of surface contours, payment for actual damages caused by North Baja's construction, reconstruction or ingress/egress, and other standard conditions. North Baja would adhere to the terms of its easement. By adhering to the terms of its right-of-way agreement, impacts on this property would be less than significant.

Parks and Recreation Sites

The Palo Verde County Park and Oxbow Recreation Site are 1.3 miles and 1.1 miles, respectively, from the proposed B-Line. Because these are low-intensity use areas that are over 1 mile from the proposed facilities, no impacts associated with the proposed Project on these areas are anticipated.

Quarries

Between MPs 29.2 and 29.6 the B-Line would pass near a rock quarry operated by the BOR. The quarry is currently inactive. No impacts on the quarry are known to have occurred during or after construction of the A-Line. Similarly, construction of the proposed B-Line is not expected to have an effect on any possible use of or access to the quarry. No other quarries would be affected by the proposed Project.

Wilderness Areas

The Palo Verde Mountains Wilderness Area is about 1.0 mile west and the Indian Pass Wilderness Area is about 1.9 miles east of the B-Line route at MPs 31.0 and 49.0, respectively. The 1964 Wilderness Act defined wilderness as areas in generally natural condition; areas having outstanding opportunities for solitude or a primitive and unconfined type of recreation; areas at least 5,000 acres or large enough to preserve use as wilderness; and areas containing ecological, geological, or other features of scientific, scenic, or historical value. The Palo Verde Mountains Wilderness Area is a 32,310-acre area designated as part of the California Desert Protection Act of 1994. Distinguishing this wilderness area are twin buttes known as the Flat Tops, which stand out as a landmark against a range of jagged peaks. About 32,083 acres are included in the Indian Pass Wilderness Area, which is a distinctive part of the Chocolate Mountains. According to the 1964 Wilderness Act, there shall be no commercial enterprise, no permanent road (except as necessary to meet minimum requirements for the administration of the area),

no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area. The area of the proposed Project does not intersect or overlap with any wilderness areas, and thus no impacts are anticipated.

Wildlife Refuges

The proposed B-Line would cross a total of 1.2 miles of the Cibola NWR at various locations between approximately MPs 29.9 and 32.3. The refuge was established in 1964 to protect the wintering grounds for migratory birds and other wildlife. Access to the refuge and use of the area by humans is strictly controlled to protect wildlife habitat. As discussed in Section 1.5.2, a decision that allows a crossing of the Cibola NWR must be compatible with the FWS Refuge Management Regulations in Part 603 FW 2.10(D). In approving a proposed utility right-of-way across the Cibola NWR, the Refuge Manager must find that none of the conditions listed in Part 603 FW 2.10(D) exist with regards to the proposed Project. The existing A-Line complied with these conditions and a favorable Compatibility Determination was issued for the installation of that pipeline. Therefore, a favorable Compatibility Determination is expected to be issued for the proposed B-Line. As a result, no significant impacts on this area are anticipated. No other State or national wildlife refuges would be crossed by or adjacent to the proposed pipelines.

Wildlife Habitat Management Area

The proposed B-Line would cross a multi-species WHMA between MPs 35.2 and 50.0. This segment of the route also crosses two portions of proposed WHMAs for bighorn sheep (MPs 35.2 to 42.0 and MPs 49.0 to 50.0). North Baja would also expand an existing valve site within this area (valve #6 at MP 41.6). Construction-related activities could impact wildlife in the WHMA. The majority of the pipeline route in this area would be within a designated utility corridor. Management goals for the WHMA include the maintenance of naturally occurring distributions of 28 special status animal species and 30 special status plant species. A second goal is to maintain proper functioning conditions in all natural communities with special emphasis on communities that are present in small quantities, have a high species richness, and support many special status species. The third goal is to maintain ecological processes by maintaining naturally occurring interrelationships among various biotic and abiotic elements of the environment.

According to the BLM, required mitigation measures within the WHMA include limiting construction activities to between July 1 and December 1 if Crissal thrashers are present, implementation of special mitigation measures to avoid disturbance of Couch's spadefoot toad habitat, and compensation for disturbance of desert dry wash woodland and desert chenopod scrub communities. Details on North Baja's proposed mitigation measures for the Crissal thrasher and the Couch's spadefoot toad are presented in Sections 4.7.6.5 and 4.7.6.12, respectively. North Baja's proposed mitigation measures for disturbance of desert wash woodlands and other desert vegetation communities are described in Section 4.5.3.

Registered Natural and Historical Landmarks

One registered natural landmark, the Tumco Mine area, is about 1.2 miles east of the B-Line route at MP 66.5. Historically, the Tumco Mine area was a gold camp that reached its peak development between 1893 and 1899 (Donald Laird Consulting 2000). This site was evaluated before construction of the A-Line and no effects associated with construction of the B-Line construction are anticipated.

The Plank Road, a California State Historical Landmark, lies in the vicinity of the proposed IID Lateral. At its nearest point, the Plank Road interpretive site is about 0.1 mile southeast of MP 6.8 of the IID Lateral. The Plank Road was a wooden, portable driving surface to provide for the passage of automobiles across the Algodones Dunes and was in use from 1916 through 1926 (BLM 1998). Because the locations of segments of the Plank Road are unknown, it could be encountered during construction of the IID Lateral. Additional information on the Plank Road is provided in Section 4.11.

Camping

Informal camping occurs in areas near the proposed Project facilities but is variable in nature with most of the activity occurring in the winter. The area surrounding the Ogilby Meter Station, in particular, is a popular camp site throughout the winter months. Construction-induced effects such as traffic, noise, and dust may affect the quality of some campers' recreational experiences, but any effects would be temporary in nature (i.e., considerably less than 1 year) and would not result in any significant impacts.

Hot Springs Long Term Visitor Area

The Hot Springs Long Term Visitor Area is located about 0.1 mile north of the proposed IID Lateral at MP 27.4. The area includes a historic and still active hot spring that attracts both local and winter visitors. Construction-induced effects such as traffic, noise, and dust may affect the quality of some visitors' recreational experiences, but any effects would be temporary in nature (i.e., considerably less than 1 year) and would not result in any significant impacts.

4.8.6 Hazardous Waste Sites

The CEQA process requires the identification of hazardous material sites pursuant to Government Code section 65962. The Department of Toxic Substances and Control (DTSC), Site Mitigation Group, was contacted regarding the proper approach to identifying hazardous material sites pursuant to the CEQA requirements. In order to fulfill these requirements, the CAL-SITES list and leaking underground storage tank (LUST) list were reviewed. The CAL-SITES is a database maintained by the DTSC that contains potential or confirmed substance release properties and is released quarterly. The LUST list, maintained by the CSWRCB, contains an inventory of reported underground storage tank incidents.

A review of the CAL-SITES database did not identify any sites that are currently on or adjacent to the proposed Project. A review of the LUST list revealed a single incident of a leaking underground fuel tank along the IID Lateral route in El Centro (case #7T2243030). The case was closed by the CRWQCB on August 28, 1992 and is not considered to be an issue for the proposed Project.

If contamination is encountered during construction of the Project, North Baja would notify the appropriate agencies. In addition, North Baja has prepared an SPCC Plan that provides preventive and mitigative measures that would be implemented to avoid or minimize the potential impact of hazardous material spills during construction (see Appendix F).

Although not classified as hazardous waste sites, two solid waste facilities and a former livestock feed yard are adjacent to the proposed facilities. The Palo Verde Solid Waste Site is 0.1 mile west of the proposed B-Line at MP 26.4, and a former solid waste disposal site was adjacent to the proposed 18th Avenue Yard near MP 5.5. No impacts on or from these facilities occurred during construction of the existing A-Line and no impacts associated with the proposed B-Line are anticipated.

A former livestock feed yard was located at the proposed 18th Avenue Yard (MPs 5.5 to 5.7). No impacts on or from this facility occurred during construction of the existing A-Line and no impacts associated with the proposed B-Line are anticipated.

4.8.7 Aesthetic Resources

The BLM uses a VRM system to identify and manage scenic values on public lands. The VRM system includes a visual resource inventory, which classifies resources on BLM land in one of four categories: class I, II, III, or IV, with class I having the highest visual sensitivity and class IV being the least sensitive.⁵ The degree of modification allowed to the basic elements of the landscape in these classes includes:

- class I: modifications should not be evident in the landscape. The level of change to the characteristic landscape should be very low and must not attract attention;
- class II: modifications should not be evident in the landscape. Contrasts are seen, but should not attract the attention of the casual observer;
- class III: modifications are evident, but should remain subordinate to the existing landscape; and
- class IV: modifications may dominate the view and be the focus of viewer attention; however, every effort should be made to minimize the impact of these activities.

Within the Project area, the BLM land in Imperial County under the jurisdiction of the El Centro and Yuma Field Offices has been categorized into VRM classes. BLM land along the proposed B-Line in Riverside County under the jurisdiction of the Palm Springs-South Coast Field Office has not been classified. Accordingly, interim VRM classes have been established for the area crossed by the pipeline route in Riverside County. The interim VRM classes are included in the summary above. The supporting VRM evaluation establishing these interim VRM classes is provided in Appendix Q.

Of the 55.2 miles of BLM-managed lands that would be crossed by the B-Line, 24.9 miles are VRM class II, 23.5 miles are VRM class III, and 6.8 miles are VRM class IV. Of the 25.7 miles of BLM-managed lands that would be crossed by the IID Lateral, 20.8 miles are VRM class II and 4.9 miles are VRM class IV. No VRM class I lands would be affected by the proposed Project.

There are two types of potential impact on visual resources associated with construction and operation of the Project facilities: that resulting from alteration of terrain and vegetation patterns due to facility construction or right-of-way maintenance and that resulting from the presence of new aboveground facilities.

Pipeline Facilities

During construction, the cleared and graded right-of-way, as well as construction equipment operating on the right-of-way, would be visible from any surrounding residences and local roads. Because the terrain over much of the Project area is relatively flat, views of the construction activity may extend for some distance. Following construction, the primary visual impact would be the right-of-way, which due to the arid climate and slow regeneration of native vegetation could be noticeable for many years. The visual impact of the right-of-way following construction depends on the visual contrast in

⁵ A full description of the BLM's VRM system is available at <http://www.blm.gov/nstc/VRM/8410.html>.

form, line, color, and texture created between the proposed facilities and the existing landscape. These factors are discussed by facility and milepost below.

B-Line

The B-Line would be constructed adjacent to North Baja's existing A-Line and would result in similar impacts on visual resources as those experienced during construction and operation of that pipeline. The landscape along the B-Line route is characterized by flat agricultural and rural residential areas, playa/alluvial fan landscapes (i.e., flat terrain, creosote scrub vegetation, desert washes), and mountain foothills. Specific segments of the pipeline route fall into one of these general categories as described below.

MPs 0.0 to 11.7 – This portion of the B-Line route comprises flat terrain with a mix of agricultural and rural residential landscapes on both sides of 18th Avenue. Agricultural operations would resume following construction. Construction activity would create a short-term visual intrusion to residents along 18th Avenue. There would be no long-term impact on visual resources in this area because little or no vegetation clearing would be required where the B-Line would be installed within the right-of-way associated with 18th Avenue. The Colorado River would be crossed using the HDD method, and setbacks from the river would protect existing vegetation. Therefore, views from the river and adjacent areas would not be affected.

Lands within this route segment in the CDCA are not managed by the BLM and do not have a VRM classification. Therefore, construction of this segment of the B-Line would not cause an inconsistency with an adopted VRM Plan. As described above, construction in this area would also not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. As a result, impacts on visual resources along this segment of the B-Line would be less than significant.

MPs 11.7 to 22.3 – Past 18th Avenue, the B-Line route joins the Western Area Power Administration transmission line corridor and continues south across the Palo Verde Mesa to the Palo Verde Mountains foothills. In this flat desert landscape, a low degree of visual impact would occur initially and would be further reduced over time. Visibility resulting from the very slight contrast in soil color and vegetative pattern between the right-of-way and adjacent areas would be offset by limited viewing opportunities afforded by areas with flat to low topographic relief and views that include existing manmade features of electric transmission lines.

The area that would be crossed has an interim VRM classification of IV. The degree of contrast with the characteristic landscape that would result from the B-Line would be consistent with the visual management objectives of this class. Changes in form, line, color, and texture would be reduced where the route would be adjacent to other linear facilities, including the existing electric transmission lines. Overall, construction in this area would not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. For these reasons, impacts on visual resources along this segment of the B-Line would be less than significant.

MPs 22.3 to 29.7 and MPs 31.5 to 79.8 – South of the Palo Verde Mountains, the surroundings of the corridor assume characteristics typical of playa/alluvial fan landscapes until the route reaches the intersection of Ogilby Road and Interstate 8. At that point, the route heads southeast through the Pilot Knob Mesa to the U.S.-Mexico border, adjacent to the sand dune system that dominates the surrounding visual setting and contributes to a moderate to high landscape quality.

In the desert landscape environment of these two route segments, a low degree of visual impact would occur initially and would be further reduced over time. Visibility resulting from the contrast in soil color and vegetative pattern between the right-of-way and adjacent areas would be partially offset by limited viewing afforded by areas with flat to low relief and views that include existing manmade features. Adjacent features along most of the length of these segments include paved and desert wash roads, levees, canals, and electric transmission lines. Over time, the contrast would diminish and the visual effect of the installed pipeline would be minimal.

The BLM lands along these two segments of the route include VRM class II and VRM class III. The degree of contrast with the characteristic landscape that would result from the B-Line would be consistent with the visual management objectives of these classes. Changes in form, line, color, and texture would be reduced where the route would be adjacent to other linear facilities. Overall, construction in this area would not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. For these reasons, impacts on visual resources along these segments of the B-Line would be less than significant.

MPs 29.7 to 31.5 – In this segment of the route, the B-Line would cross hilly to flat terrain with a backdrop created by the steeper slopes of the Palo Verde Mountains to the west. Potential viewing locations include SR 78, which is parallel to a portion of the route in this segment. Few longitudinal views down North Baja's existing right-of-way occur in this area. Glimpses of the existing right-of-way can be seen while traveling on SR 78, but the dominant feature is the mid-distance views of the Colorado River bottom covered by expanses of tamarisk. The highway alignment in this area is curvilinear with vertical changes in grade. A single lane exists in either direction. All of these features compete with the viewer's attention.

Lands in this route segment are VRM class III. The degree of contrast with the characteristic landscape that would result from the B-Line would be consistent with the visual management objectives of this class. Overall, construction in this area would not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. As a result, impacts on visual resources along this segment of the B-Line would be less than significant.

Arrowhead Extension

The route associated with the Arrowhead Extension would cross flat terrain with a mix of agricultural and rural residential landscapes on both sides of Arrowhead Boulevard. Agricultural operations would resume following construction. Construction activity would create a short-term visual intrusion along Arrowhead Boulevard. There would be no long-term impact on visual resources in this area because little or no vegetation clearing would be required where the pipeline would be installed within the right-of-way associated with Arrowhead Boulevard, and agricultural operations would resume following construction where the pipeline would be outside the road right-of-way. The lands affected by the Arrowhead Alternative are not managed by the BLM and do not have a VRM classification.

IID Lateral

The IID Lateral would be constructed within or adjacent to existing rights-of-way for the majority of the route. The landscape along the IID Lateral route is characterized by sand dunes, playa/alluvial fan landscapes (i.e., flat terrain, creosote scrub vegetation, desert washes), and agricultural areas. Specific segments of the lateral route fall into one of these general categories as described below.

MPs 0.0 to MP 7.9 – This portion of the IID Lateral would cross the ISDRA, which contains the largest mass of sand dunes in California. The ISDRA is recognized for its frequent use as a backdrop for commercials and movies because of its unique beauty and landscape. Very little vegetation is present due to intense OHV use. Manmade modifications in the vicinity of the IID Lateral in this area include Interstate 8, the All-American Canal, the Coachella Canal, and several wood-pole and steel-lattice-tower electric transmission lines that traverse the dunes in an east-west direction.

The BLM lands along this segment of the route include VRM class II and VRM class IV. The degree of contrast with the characteristic landscape that would result from the IID Lateral would be consistent with the visual management objectives of these classes. Changes in form, line, color, and texture would be reduced where the route would be adjacent to other linear facilities. Moreover, wind-deposited sand is expected to mask most remaining visual evidence of the right-of-way within a relatively short period following construction. Overall, construction in this area would not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. For these reasons, impacts on visual resources along this segment of the IID Lateral would be less than significant.

MPs 7.9 to 27.6 – The landscapes that would be crossed by the IID Lateral through this area include desert environments adjacent to or within manmade features such as Evan Hewes Highway and other Imperial County roadways as well as electric transmission lines. In the desert landscape environment of this route segment, a low degree of visual impact would occur initially and would be further reduced over time. Visibility resulting from the contrast in soil color and vegetative pattern between the right-of-way and adjacent areas would be partially offset by limited viewing afforded by areas with flat to low relief and views that include existing manmade features. Over time, the contrast would diminish and the visual effect of the installed pipeline would be minimal.

The BLM lands along this segment of the route include VRM class II. The degree of contrast with the characteristic landscape that would result from the IID Lateral would be consistent with the visual management objectives of this class. Changes in form, line, color, and texture would be reduced where the route would be adjacent to other linear facilities. Overall, construction in this area would not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. For these reasons, impacts on visual resources along this segment of the IID Lateral would be less than significant.

MPs 27.6 to 45.7 – This portion of the IID Lateral comprises flat terrain with a mix of agricultural and rural residential landscapes on both sides of several Imperial County roadways. Agricultural operations in these areas would resume following construction. Construction activity would be a short-term visual intrusion to residents along the roadways. There would be no long-term impact on visual resources in this area because little or no vegetation clearing would be required where the lateral would be installed within the road rights-of-way.

Lands within this route segment in the CDCA are not managed by the BLM and do not have a VRM classification. Therefore, construction of this segment of the IID Lateral would not cause an inconsistency with an adopted VRM Plan. Construction in this area would also not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings. As a result, impacts on visual resources along this segment of the IID Lateral would be less than significant.

Aboveground Facilities

The area near the Ehrenberg Compressor Station has a mix of industrial and rural landscape characteristics. During modifications at the station, the presence of construction workers and equipment in the Project area would be a minor detraction. All modifications at the facility would be at or near ground level and would be visually unobtrusive. Because the facility is not on BLM land, it does not have a VRM classification.

Rannells Trap is within an open scrub-shrub desert landscape near the boundary of the agricultural area of the Palo Verde Valley to the east. The facility would be expanded by 0.3 acre to accommodate the new pig launcher and receiver. The land for this facility is not managed by the BLM and does not have a VRM classification.

The existing Ogilby Meter Station is on flat terrain within an open scrub-shrub desert landscape. This site is on land managed by the BLM and has a VRM designation of class II. The modifications and additional pig launcher and receiver at the Ogilby Meter Station would require an expansion of the facility by 0.2 acre for both construction and operation. The modified structure would be visible to travelers on Interstate 8 but it would be seen in the context of the existing facility as well as other manmade structures such as electric transmission lines. The degree of contrast would not attract attention and would be consistent with the visual management objectives for VRM class II areas.

Four new valves associated with the B-Line would be collocated with existing valves along the A-Line. No new permanent right-of-way would be required for these valves, except for valve #2 along 18th Avenue. This valve would require a 12-foot by 24-foot expansion of the existing fenced site. The land for this expanded valve is not managed by the BLM and does not have a VRM classification. The other five valves would be within the sites of the Ehrenberg Compressor Station, Rannells Trap, and Ogilby Meter Station and would not result in any additional impacts on visual resources.

The Blythe-Arrowhead Meter Station and pig receiver would be constructed in the existing utility yard associated with SoCalGas' Blythe Compressor Station. Its appearance would be consistent with the existing character of the area and would result in only a minor change in the visual landscape. The pig launcher and portions of the valves would be the only aboveground structures at the site in the northeast corner of the intersection of 18th Avenue and Arrowhead Boulevard at the beginning of the Arrowhead Extension. The pig launcher would extend approximately 6 to 8 feet above the surface, the valve stem operator would be 5 feet in height, and a blowdown silencer would be about 6 to 8 feet in height. The land for these facilities is not managed by the BLM and does not have a VRM classification.

The tap at the B-Line and pig launcher for the IID Lateral would require an 80-foot by 100-foot site for construction and operation. The land for this facility is managed by the BLM and has a VRM classification of II. The degree of change associated with this facility would be consistent with the visual management objectives of this class.

The proposed El Centro Meter Station and pig receiver would be installed within the existing fenceline of the El Centro Power Generating Station. Its appearance would be consistent with the existing character of the area and would result in only a minor change in the visual landscape. Because the facility is not on BLM land, it does not have a VRM classification.

One of the four new valves associated with the IID Lateral would be collocated with the tap at the B-Line and pig launcher as discussed above. The three remaining valves along the IID Lateral would each require 10-foot by 25-foot fenced sites within North Baja's permanent right-of-way. The valves at MPs 7.6 and 27.2 would be on BLM land with a VRM classification of II. The degree of change

associated with these facilities would be consistent with the visual management objectives of this class. The valve at MP 38.7 would not be on land managed by the BLM and does not have a VRM classification.

Construction of the new aboveground facilities would have a permanent impact on visual resources. Modifications at the existing aboveground facilities would result in an incremental increase in impacts on visual resources but would generally be minor because of the presence of the existing facilities. Overall, for those facilities on BLM land, the degree of contrast with the characteristic landscape resulting from each of the facilities would be consistent with the visual management objectives of the affected classes. In addition, North Baja would paint the new or additional facilities so they would blend with the surrounding landscape. Construction of these facilities would not result in a substantial adverse effect on a scenic area or vista, substantially damage scenic resources, or substantially degrade the existing visual character or quality of the area or its surroundings.

Security lighting at the aboveground facilities would be low sodium vapor light that would be angled toward the interior of the station. Some small floodlights would be used at the sites but they would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

For these reasons, impacts on visual resources associated with the aboveground facilities would be less than significant.

Pipe Storage and Contractor Yards

With the possible exception of minor grading activities and surfacing, soils at the pipe storage and contractor yards would not be disturbed. As a result, there would be no permanent impacts on visual resources associated with the use of these yards.

Access Roads

North Baja proposes to use several existing roads for temporary right-of-way access during construction. These access roads are primarily paved or dirt roads and/or jeep trails that would be graded or otherwise improved as needed to move equipment and materials to the construction right-of-way. Because these are existing roads, these activities would not result in significant impacts on visual resources.

Approximately 485 feet of new temporary access roads would be required for the Project, of which about 60 feet would be retained as permanent access to the proposed Blythe-Arrowhead Meter Station at the end of the Arrowhead Extension and 160 feet would be retained as permanent access to the proposed tap at the B-Line and pig launcher at the beginning of the IID Lateral. A permanent access road would also be required to proposed valve #2 at MP 7.6 of the IID Lateral but North Baja would utilize existing roads with some modification and would not need to construct a new road. The land associated with the new permanent access road to the Blythe-Arrowhead Meter Station is not managed by the BLM and does not have a VRM classification. The land associated with the new permanent access road to the proposed tap at the B-Line and pig launcher at the beginning of the IID Lateral is managed by the BLM and has a VRM classification of II. The degree of change associated with this new road would be consistent with the visual management objectives of this class. Overall, no significant impacts on visual resources associated with these access roads are anticipated.

4.8.8 No Project Alternative

Under the No Project Alternative, the FERC would deny North Baja's application for a Certificate and a Presidential Permit amendment, the CSLC would deny North Baja's application for an amendment to its right-of-way lease across California's Sovereign and School Lands, and the BLM would deny North Baja's application to amend its existing Right-of-Way Grant and obtain a Temporary Use Permit for the portion of the Project on Federal lands. The No Project Alternative means that the Project would not go forward and the Project-related facilities would not be installed. Accordingly, none of the potential impacts on land use identified for the construction and operation of the proposed Project would occur.

Because the proposed Project is privately funded, it is unknown whether North Baja would fund another energy project in California. However, should the No Project Alternative be selected, the energy needs identified in Section 1.1 would likely be addressed through other means, such as through other LNG or natural gas-related pipeline projects. Such projects may result in potential environmental impacts of the nature and magnitude of the proposed Project as well as impacts particular to their respective configurations and operations; however, these impacts cannot be predicted with any certainty at this time.

4.9 SOCIOECONOMICS

The socioeconomic study area considered for this analysis includes La Paz County, Arizona, and Riverside and Imperial Counties, California. Socioeconomic information is presented based on county-level census data for La Paz and Imperial Counties. With the exception of tax revenues, information for Riverside County is based on data from Congressional District 45, which encompasses the eastern portion of the county. Because the western portion of the county is more densely populated, data from Congressional District 45 are more reflective of the Project area than data from all of Riverside County.

4.9.1 Significance Criteria

An adverse socioeconomic impact would be considered significant and would require mitigation if Project construction or operation would:

- cause a permanent population increase of 3 percent or more in a county affected by the Project;
- cause the vacancy rate for temporary housing to fall to less than 5 percent; or
- increase the short- or long-term demand for public services in excess of existing and projected capacities.

4.9.2 Population, Economy, and Employment

All three counties are sparsely populated in the vicinity of the proposed Project. Within the study area, Congressional District 45 (within Riverside County) has the highest population and density; however, this is due to the significantly higher population density in the western half of the district. Table 4.9.2-1 provides a summary of selected demographic and socioeconomic statistics for Arizona and California and each of the counties where Project facilities are proposed.

The counties within the study area experienced small to moderate population growth between 2000 and 2004. The population within La Paz County increased by only 0.9 percent, which is significantly lower than the 12.0 percent population increase for the State of Arizona. Within California, Imperial County experienced population growth of 7.1 percent and Riverside County (Congressional District 45) experienced population growth of 14.7 percent. Both of these growth rates are higher than the overall growth rate for the State of California (6.0 percent).

Table 4.9.2-2 identifies the anticipated workforce and construction schedule for the facilities associated with the Project. Due to the specialized nature of pipeline construction, North Baja expects to hire most construction personnel from outside the study area. Based on the brief construction period, and the small number of workers who brought their families during construction of the A-Line, North Baja anticipates that most non-local construction workers would not be accompanied by their families. North Baja estimates that the peak workforce would be between 300 and 400 workers during construction of the B-Line in late 2009. During this phase of construction, 240 to 320 workers are expected to temporarily relocate to the Project area. Based on the current population size within the study area, and the relatively small number of construction workers who would temporarily relocate to the area, impacts on the population numbers in the Project area would be minor and short term.

TABLE 4.9.2-1

Existing Socioeconomic Conditions in the North Baja Pipeline Expansion Project Study Area

State/County	Population		Percent Change	Population Density ^a		Per Capita Income		Civilian Labor Force 2004	Unemployment Rate (percent) 2004	Top Two Employment Industries 2004
	2000	2004		2000	2004	1999	2003			
Arizona	5,130,632	5,743,834	12.0	45.1	50.5	\$20,275	\$27,232	2,762,612	5.0	1. Educational, health and social services 2. Retail Trade
La Paz	19,715	19,898	0.9	4.4	4.4	\$14,916	\$18,653	7,500	6.7	1. Arts, entertainment, recreation, accommodation, and food services 2. Educational, health and social services
California	33,871,648	35,893,799	6.0	217.2	230.1	\$22,711	\$33,415	17,522,300	6.2	1. Educational, health and social services 2. Manufacturing
Riverside ^b	639,088	732,855	14.7	106.9	122.6	\$19,423	\$22,201	323,918	5.8	1. Educational, health and social services 2. Retail trade
Imperial	142,361	152,448	7.1	34.1	36.5	\$13,239	\$20,674	59,900	17.1	1. Educational, health and social services 2. Retail Trade

^a Persons per square mile based on population and land area: Arizona (113,642.2 square miles), La Paz County (4,518 square miles), California (155,973.2 square miles), Riverside County (Congressional District 45 - 5,979.9 square miles), and Imperial County (4,175.1 square miles).

^b Represents Congressional District 45, which encompasses the Project area in the eastern portion of Riverside County.

Sources: U.S. Department of Commerce, Bureau of the Census, State and County Quickfacts, Estimates for 2004.

U.S. Department of Commerce, Bureau of the Census, American Community Survey, Fast Facts for Congress, Estimates for 2004.

U.S. Department of Commerce, Bureau of the Census, California Congressional Districts by Urban and Rural Population and Land Area.

Bureau of Economic Analysis, Regional Economic Accounts for 2003.

Employment Development Department 2005.

TABLE 4.9.2-2						
Anticipated Construction Workforce for the North Baja Pipeline Expansion Project						
Facility	Approximate Mileposts	Time Period	Construction Duration	Anticipated Workforce		County/State
				Local	Non-local	
Arrowhead Extension, Blythe-Arrowhead Meter Station, Aboveground Facility Modifications	Various	2007	2 to 4 months	10	40	La Paz, AZ Riverside, CA Imperial, CA
B-Line	0.5 to 79.8	Late 2009	4 to 6 months	60 to 80	240 to 320	Riverside, CA Imperial, CA
IID Lateral	0.0 to 13.7	Summer/Fall 2008	2 to 3 months	20 to 30	80 to 120	Imperial, CA
	13.7 to 45.7	Late 2008/early 2009	3 to 4 months	20 to 30	80 to 120	Imperial, CA

Because North Baja currently operates an existing pipeline system in the Project area, no additional permanent employees would be required. Personnel from North Baja's existing staff would assume operation and maintenance of the new facilities as part of their existing routine workload. Therefore, the Project would not cause a permanent population increase in any of the affected counties.

Annual per capita income in 2003 (estimated) was lower in all three counties that would be affected by the proposed Project than the respective State averages (\$27,232 in Arizona and \$33,415 in California), ranging from \$18,653 in La Paz County to \$22,201 in Riverside County (Congressional District 45). Educational, health, and social services rank as the largest employment industries in both Arizona and California and in two of the three affected counties (see Table 4.9.2-1). In La Paz County, accommodations and food services are the top industries by employment, reflecting the importance and impact of tourism relative to other economic sectors in that county.

Unemployment rates in the three counties affected by the Project ranged from 5.8 percent in Riverside County to 17.1 percent in Imperial County. North Baja anticipates that up to 80 local workers would be employed during the peak construction period of the Project (construction of the B-Line). Given the relatively high unemployment rates in the study area, sufficient numbers of local workers are expected to be available for construction of the Project.

During the three phases of construction (see Table 4.9.2-2), North Baja estimates that the total Project payroll would be about \$50,000,000, a portion of which would be spent locally for the purchase of housing, food, gasoline, and entertainment. These direct payroll expenditures would have a beneficial impact on local economies.

4.9.3 Housing

Housing characteristics within the study area are presented in Tables 4.9.3-1 and 4.9.3-2. Table 4.9.3-1 presents an overview of the total housing units, including owner- and renter-occupied units, median value and monthly rental rates, and vacancy rates in the study area. Table 4.9.3-2 lists the number of units available for temporary use. All three counties have lower median rents and higher rental vacancy rates than their respective State averages.

TABLE 4.9.3-1							
2000 Housing Characteristics in the North Baja Pipeline Expansion Project Study Area							
State/County	Total Housing Units	Owner Occupied (percent)	Renter Occupied (percent)	Median Value, Owner Occupied Units	Median Gross Monthly Rent	Owner Vacancy Rate (percent)	Rental Vacancy Rate (percent)
Arizona	2,189,189	68	32	\$121,3000	\$619	2.1	9.2
La Paz	15,133	78	22	\$86,500	\$442	3.7	14.8
California	12,214,549	56.9	43.1	\$211,500	\$747	1.4	3.7
Riverside ^a	278,037	69.2	30.8	\$138,400	\$644	3.0	9.0
Imperial	43,891	58.3	41.7	\$100,000	\$504	1.4	4.9
^a Represents Congressional District 45, which encompasses the Project area in the eastern portion of Riverside County.							
Source: U.S. Department of Congress, Bureau of the Census 2000 State and County Quickfacts.							

TABLE 4.9.3-2				
2000 Temporary Housing Characteristics in the North Baja Pipeline Expansion Project Study Area				
State/County	Units for Rent	Vacant for Seasonal, Recreational, or Occasional Use	Vacant for Migrant Workers	Other Vacant
Arizona	61,781	141,965	636	43,026
La Paz	320	5,237	31	856
California	190,321	236,857	2,205	139,253
Riverside ^a	3,054	2,865	2	1,019
Imperial	842	2,081	38	997
^a Represents Congressional District 45, which encompasses the Project area in the eastern portion of Riverside County.				
Source: U.S. Department of Congress, Bureau of the Census 2000, Vacant Housing Units.				

Temporary housing availability varies seasonally and geographically within the counties and the few communities crossed by the proposed pipeline facilities. Temporary housing is least available during the winter, when residents of northern states come to take advantage of the warmer weather. There is less demand for temporary housing during the hot summer months. Reflecting the importance of tourism in La Paz County, there are nearly twice as many units available for seasonal, recreational, or occasional use than in either Riverside or Imperial Counties.

In the study area, temporary housing is available in the form of apartments as well as daily, weekly, and monthly rentals in motels, hotels, campgrounds, and rooming houses. The Quartzsite area east of Ehrenberg, Arizona, for example, has more than 50 recreational vehicle (RV) and mobile home parks that help accommodate more than 1 million visitors each year (Quartzsite Chamber of Commerce 2004). Additionally, temporary housing is available in Yuma, Arizona, which lies about 10 miles southeast of the terminus of the B-Line in Yuma County, Arizona.

Construction of the Project could affect the availability of temporary housing in the Project area. However, because the construction periods for the proposed phases of the Project are relatively short, and because most non-local workers are expected to come alone without their families due to the temporary nature of the relocations, most workers are likely to use hotels, motels, apartments, and campgrounds within commuting distance of the Project area. Non-local workers should be able to locate temporary housing in the Blythe area; in the campgrounds and RV parks east of Ehrenberg; or near Yuma.

Assuming that local construction workers do not require housing, up to 320 housing units may be required for the non-local workers. Previous pipeline experience, including construction of the A-Line in 2002, suggests that non-local workers typically select a variety of temporary housing accommodations, with approximately 30 percent providing their own housing units (i.e., travel trailers or RV campers). Given the vacancy rates in the area and the number of seasonal, recreational, or occasional use units available, construction crews should not encounter difficulty in finding temporary housing and would not cause the vacancy rate for temporary housing to fall to less than 5 percent in La Paz or Riverside Counties. Although the vacancy rate for temporary housing in Imperial County is currently about 5 percent, this rate is unlikely to change due to construction. Based on previous experience during construction of the A-Line, most non-local workers temporarily relocating to the southern portion of the Project area would likely find housing near Yuma. In addition, construction of the portion of the IID Lateral that would cross the ISDRA would occur during the summer, when the availability of temporary housing is at its highest. Therefore, construction of the Project would not significantly affect the Imperial County vacancy rate. As a result, impacts on housing associated with the proposed Project would be less than significant.

4.9.4 Public Services

A wide range of public services and facilities are offered in Ehrenberg and Yuma, Arizona (at the origin of the proposed B-Line and about 10 miles southeast of the terminus of the B-Line, respectively) and in Blythe and El Centro, California (near MP 5.0 of the proposed B-Line and at the western terminus of the proposed IID Lateral, respectively). Available services and facilities include emergency services (e.g., full-service law enforcement, fire departments, emergency response services, and hospitals), utilities and public service systems (e.g., water and sewer services), solid waste disposal, and schools. Public services potentially affected by the Project are discussed below.

Emergency Services

Emergency services for the Project would be provided by a combination of State, county, and local departments. In the area near the Ehrenberg Compressor Station, emergency fire and medical services are provided by the Ehrenberg Fire Department, which is currently finishing an expansion to include a new 12,000 square foot facility. Ambulance service is dispatched from Quartzsite, Arizona with dispatch services provided by the La Paz County Sheriff's Department (La Paz County Sheriff's Department 2004). In portions of Riverside County and northern Imperial County, emergency services are provided by the Blythe Police and Fire Departments. In areas of Riverside County that do not have a city fire department, fire and medical emergency services are provided primarily by the California Department of Forestry. In Imperial County, the Imperial County Fire Department provides fire and medical emergency services. The Winterhaven Fire Protection District is the closest emergency response agency to North Baja's existing A-Line; however, emergency personnel and vehicles can be dispatched from El Centro, Palo Verde, Brawley, Holtville, or a number of other locations within Imperial County depending on the nature and exact location of the emergency. Services can be dispatched through the sheriff's office, California Highway Patrol, El Centro Police Department, or other entities depending upon where the emergency call originates (Capitol Impact 2005). In comments on the draft EIS/EIR, both the Ehrenberg Fire Department and Winterhaven Fire Protection District expressed support for the proposed Project.

Because the non-local workforce would be small relative to the current population, construction of the pipeline facilities would result in minor, temporary, or no impact on local community facilities and services such as police, fire, and medical services. Local communities have adequate infrastructure and community services to meet the needs of the non-local workers that would be required for the Project. Other construction-related demands on local agencies could include increased enforcement activities

associated with issuing permits for vehicle load and width limits, local police assistance during construction at road crossings to facilitate traffic flow, and emergency medical services to treat injuries resulting from construction accidents. North Baja would work with local firefighters and other emergency responders to coordinate activities for effective emergency response and would develop an Emergency Response Plan (see Section 4.14.2). As part of the Emergency Response Plan, North Baja would establish and maintain communications with local fire, police, and public officials and would make personnel, equipment, tools, and materials available at the scene of an emergency. The degree of impact on public services would vary from community to community depending on the number of non-local workers (and accompanying family members, if any, as previously indicated) that temporarily reside in each community, how long they stay, and the size of the community. Although these factors are too variable to accurately predict the severity of the impact, the effects would be short term and would not be in excess of existing and projected capabilities and are therefore not significant.

Utilities and Public Service Systems

During construction, the Project would require the temporary use of water for hydrostatic testing of the pipelines, but the water would not be permanently removed from the supply system. North Baja would also withdraw water for dust control during construction. This water would be procured from irrigation districts, North Baja's own water sources, or other local water purveyors (see Section 4.3.4). The Project has no wastewater treatment requirements and would not require construction of new or expanded wastewater facilities, or stormwater drainage facilities that could cause significant environmental effects.

North Baja would consult with the local governments as well as the Underground Service Alert of Southern California before construction to establish the precise locations of underground utilities along the proposed pipeline and lateral routes. All water delivery systems, water wells, water lines, and underground utilities would be clearly marked and would be avoided during construction; however, if these facilities are encountered, the required separations would be maintained by North Baja. In the event that any of these facilities are inadvertently affected during construction, North Baja would immediately notify the utility operator so that repairs could be made promptly.

Operation of the Project would have no additional permanent water supply needs and would not require the construction or expansion of wastewater or stormwater facilities. North Baja would comply with all Federal, State, and local statutes and regulations related to wastewater and stormwater.

Because the Project would not increase the short- or long-term demand for these services in excess of existing and projected capabilities, any impacts associated with these facilities would be less than significant.

Solid Waste

Construction of the Project would generate modest amounts of solid waste (e.g., food containers, packaging, and construction scraps) over a relatively short period of time. Existing disposal services and landfills in the Project area include Imperial County Sanitation in Imperial; Palo Verde Valley Disposal Service in Blythe; and Suburban Sanitation Services and the South Yuma County Landfill in Yuma. These facilities would be able to accommodate the solid waste generated by the Project. Operation of the Project would not require any additional employees and would not result in the construction or expansion of any landfills. North Baja would comply with all Federal, State, and local statutes and regulations related to solid waste disposal. As a result, no significant impacts are anticipated.

Schools

Comments were received during the scoping process regarding the proximity of the proposed facilities to school property and potential impacts on school bus routes. The Palo Verde Unified School District, El Centro Elementary School District, and Holtville Unified School District serve students in the Project area. The closest school to the proposed Project is Meadows Elementary School, which is more than 0.75 mile west of the terminus of the IID Lateral in El Centro. No potentially significant impacts on this school are anticipated from either construction or operation of the proposed Project.

Potential impacts on school bus routes could occur during construction of the proposed Project. The Palo Verde Unified School District manages school bus routes in Blythe that travel along 18th Avenue. In addition, bus routes cross 18th Avenue at the intersections of Intake Boulevard, South C & D Canal Boulevard, South Broadway, DeFrain Boulevard, Arrowhead Boulevard, Neighbors Boulevard, and Keim Boulevard. During construction, bus traffic may be slightly disrupted in the same manner as other traffic; however, access by school buses would not be precluded. Potential impacts on traffic as a result of the proposed Project are discussed in detail in Section 4.10.

Because most of the non-local workers are expected to come alone without their families during the construction period and because no additional permanent employees would be required during operation of the proposed facilities, the Project would not result in any increases in demand for school-related services.

4.9.5 Property Values

Comments were received during the scoping process regarding the impacts of the proposed Project on property values. North Baja currently maintains easements to operate its A-Line. Placement of the B-Line adjacent to the existing A-Line should not change or affect the value of a property. Because the B-Line would be entirely within North Baja's existing easement, North Baja would not need to acquire new permanent easements or property to operate this facility. North Baja would, however, need to acquire temporary easements or property to construct the proposed facilities. North Baja would also need to acquire the applicable easements for the Arrowhead Extension and the IID Lateral. The easement acquisition process is described in Section 4.8.2.

The effect that a pipeline easement may have on property value is a damage-related issue that would be negotiated between the landowner and North Baja during the easement acquisition process. The easement acquisition process is designed to provide fair compensation to the landowner for the right to use the property for pipeline construction and operation. Appraisal methods used to value land are based on objective characteristics of the property and any improvements. The impact a pipeline may have on the value of a tract of land depends on many factors, including the size of the tract, the values of adjacent properties, the presence of other utilities, the current value of the land, and the current land use. Subjective valuation is generally not considered in appraisals. This is not to say that the pipeline would not affect resale values. A potential purchaser of property may make a decision to purchase land based on his or her planned use, such as agricultural, future subdivision, or second home on the property in question. If the presence of a pipeline renders the planned use unfeasible, it is possible that a potential purchaser would decide not to purchase the property. However, each potential purchaser has different criteria and differing capabilities to purchase land.

The Interstate Natural Gas Association of America (INGAA) conducted a national case study to determine if the presence of a pipeline on a piece of property affected the property value or sale price of the property. The *INGAA Foundation Natural Gas Pipeline Impact Study* (2001) found that there was not a significant impact on the sale price of properties along natural gas pipelines. The study further

concluded that neither the size of the pipeline (diameter) nor the product carried by a pipeline has any significant impact on sale price.

Property taxes for a piece of property are generally based on the actual use of the land. Construction of the pipeline would not change the general use of the land, but would preclude construction of aboveground structures on the permanent right-of-way. If a landowner believes that the presence of a pipeline easement reduces the value of his or her land, resulting in an overpayment of property taxes, he or she may appeal the issue of the assessment and subsequent property taxation to the local property tax agency. This is the proper forum for this issue to be addressed.

Comments were received during the scoping process that installation of the pipeline adjacent to Parker Road in El Centro would have a negative impact on income from rental property. The effect that construction may have on income derived from rental property is a damage-related issue and should be negotiated between the parties during the easement acquisition process. This negotiation is outside of the scope of this EIS/EIR.

4.9.6 Tax Revenues

Construction and operation of the Project would have a beneficial impact on local tax revenue, based on the tax revenue projections contained in Tables 4.9.6-1 and 4.9.6-2. Revenue from sales tax would be greater during construction due to the temporary influx of workers to the area. The increase in property tax revenue, about \$3.4 million annually, would be generated throughout the life of the Project.

TABLE 4.9.6-1		
Estimated Property Tax Payments for Facilities Associated with the North Baja Pipeline Expansion Project		
Facility	Location	Estimated Annual Tax Payment
Ehrenberg Compressor Station Modifications, El Paso Meter Station Modifications, and B-Line	La Paz County, Arizona	\$145,000
B-Line, Arrowhead Extension, and Blythe-Arrowhead Meter Station	Riverside County, California	\$786,000
B-Line, Ogilby Meter Station Modifications, IID Lateral, and El Centro Meter Station	Imperial County, California	\$2,512,000
Project Total		\$3,443,000

TABLE 4.9.6-2				
Estimated Sales Tax Revenue Generated by the North Baja Pipeline Expansion Project				
	Project Total	La Paz County, Arizona	Riverside County, California	Imperial County, California
Payroll	\$50,000,000	NA	NA	NA
Percent of total income spent for taxable sales	38.8	NA	NA	NA
Income spent for taxable sales	\$19,400,000	NA	NA	NA
Percent spent in each county	--	5%	55%	40%
Income spent for taxable sales by county	--	\$970,000	\$10,670,000	\$7,760,000
Tax rate - State jurisdiction	--	5.6%	6.25%	6.25%
Tax rate - county/city jurisdiction	--	1.0%	1.5%	1.5%
Sales tax to State	--	\$54,320	\$666,875	\$485,000
Sales tax to county/city	--	\$9,700	\$160,050	\$116,400
Source: California State Board of Equalization 2005. Arizona Department of Revenue 2006.				
NA = Not Available.				

As discussed in Section 4.9.2, North Baja estimates that the total Project payroll would amount to about \$50,000,000. Of this total, North Baja anticipates that about 40 percent would be spent for taxable sales (see Table 4.9.6-2). Sales taxes in the counties affected by the Project in Arizona and California are 6.6 percent and 7.75 percent, respectively. The majority of this amount (5.6 percent in Arizona and 6.25 percent in California) would go to the State. The remainder (1.0 percent in Arizona and 1.5 percent in California) would go to the county and local governments, resulting in annual sales tax revenues of \$9,700 to La Paz County, \$160,050 to Riverside County, and \$116,400 to Imperial County.

4.9.7 No Project Alternative

Under the No Project Alternative, the FERC would deny North Baja's application for a Certificate and a Presidential Permit amendment, the CSLC would deny North Baja's application for an amendment to its right-of-way lease across California's Sovereign and School Lands, and the BLM would deny North Baja's application to amend its existing Right-of-Way Grant and obtain a Temporary Use Permit for the portion of the Project on Federal lands. The No Project Alternative means that the Project would not go forward and the Project-related facilities would not be installed. Accordingly, none of the potential socioeconomic impacts identified for the construction and operation of the proposed Project would occur.

Because the proposed Project is privately funded, it is unknown whether North Baja would fund another energy project in California. However, should the No Project Alternative be selected, the energy needs identified in Section 1.1 would likely be addressed through other means, such as through other LNG or natural gas-related pipeline projects. Such projects may result in potential environmental impacts of the nature and magnitude of the proposed Project as well as impacts particular to their respective configurations and operations; however, these impacts cannot be predicted with any certainty at this time.

4.10 TRANSPORTATION AND TRAFFIC

The local road and highway system in the vicinity of the Project facilities is well developed. The principal north/south roadways are SRs 78 and 111, and the principal west/east roadways are Interstates 8 and 10. Most local public roads in the vicinity of the proposed Project are paved. There is also rail service in the Project area. Construction of the North Baja Pipeline Expansion Project could affect transportation and traffic during construction across and within roadways and railroads and due to increased vehicle traffic associated with the commuting of the construction workforce to the Project area as well as the movement of construction vehicles and delivery of equipment and materials to the construction work area.

4.10.1 Significance Criteria

An adverse impact on transportation and traffic would be considered significant and would require mitigation if Project construction or operation would:

- result in a short- or long-term decrease in the level of service of a roadway;
- cause the closure of an arterial or collector roadway for more than 48 hours consecutively;
- prevent movement of emergency vehicles;
- conflict with planned transportation projects or adopted public transportation policies;
- create noticeable deterioration of local roadway surfaces; or
- create a safety hazard for vehicles, pedestrians, or rail operations.

4.10.2 Construction Across and Within Roadways and Railroads

Construction across roads and highways would result in short-term impacts on public transportation while construction activities pass through the Project area. Table 4.10.2-1 lists the named roads and highways that would be crossed by the proposed Project, as well as North Baja's proposed construction method.

North Baja would apply for the permits necessary for road crossings and would comply with all permit stipulations. The railroad crossings would be bored. Boring typically requires temporary extra workspace on both sides of the crossing for excavating bore pits to the depth of the pipeline. The bore pits are typically just outside of the road or railroad right-of-way limits; however, site-specific conditions, such as the presence of structures or waterbodies, may require the bore pits and temporary extra workspace to be moved within the road right-of-way. In some cases, 24-hour operations are required during difficult boring operations where ground conditions and ambient daytime temperatures contribute to overheating of the equipment and operators. Roadways and railroads crossed using the bore construction method typically remain open so that construction would not prevent the movement of emergency vehicles. Overall, there would be little or no disruption to traffic at road or railroad crossings that are bored. Bored crossings would also minimize the potential for safety hazards for vehicles and rail operations. No work would occur within the road or railroad rights-of-way unless expressly permitted by the applicable agency. As a result, impacts on roads and railroads that would be crossed using the bore construction method would be less than significant.

TABLE 4.10.2-1

Named Roads Crossed by the North Baja Pipeline Expansion Project

Facility/Location	Milepost	Road Name	Proposed Crossing Method
B-Line			
La Paz County, Arizona		- None Crossed -	
Riverside County, California	0.4	Riviera Drive	HDD
	3.4	Intake Boulevard	Open cut
	4.0	Jones Road	Open cut
	4.4	C & D Boulevard	Bore
	4.9	South Broadway Road	Open cut
	5.4	Lovekin Boulevard	Bore
	5.4	Arizona – California Railroad	Bore
	6.5	DeFrain Boulevard	Open cut
	7.4	Arrowhead Boulevard	Open cut
	8.5	State Route 78	Bore
	9.5	Stephenson Boulevard	Open cut
	10.5	Keim Road	Bore
	11.5	Rannells Road	Open cut
Imperial County, California	25.6	Old Palo Verde Road	Open cut
	28.2	State Route 78	Bore
	31.4	Old Mitchell's Camp Road	Open cut
	33.1	Three Slashes Road	Open cut
	35.0	Walters Camp Road	Open cut
	49.0	Black Mountain Road	Open cut
	55.0	Ogilby Road (County Highway S34)	Bore
	66.4	Gold Rock Ranch Road	Open cut
	70.9	Ted Kipf Road	Open cut
	71.0	American Girl Mine Road	Open cut
	71.4	Union Pacific Railroad	Bore
	74.5	Ogilby Road (County Highway S34)	Bore
	75.0	Center of the World Drive	Bore
	75.1	Interstate 8	Bore
Arrowhead Extension			
Riverside County, California			
	1.0	Seeley (16 th) Avenue	Bore
	1.5	Arrowhead Boulevard	Bore
	2.0	14 th Avenue	Bore
IID Lateral			
Imperial County, California			
	2.4	Interstate 8	HDD
	3.5	Grays Well Road	Open cut
	4.4	Grays Well Road	Open cut
	5.6	Grays Well Road	Open cut
	5.7	Interstate 8	Bore
	8.5	Gordons Well Road	Open cut
	13.1	Brock Research Road	Bore
	13.6	Evan Hewes Highway	Open cut
	26.0	Evan Hewes Highway	Open cut
	27.3	Interstate 8	Bore
	28.5	Vanderlinden Road	Open cut
	29.5	Miller Road (County Highway S33)	Bore

TABLE 4.10.2-1 (cont'd)

Named Roads Crossed by the North Baja Pipeline Expansion Project

Facility/Location	Milepost	Road Name	Proposed Crossing Method
	30.5	Enz Road	Open cut
	31.5	Bonds Corner Road	Bore
	32.0	Schali Road	Open cut
	33.2	Towland Road	Open cut
	34.2	State Route 7 (Holtville Orchard Road)	Bore
	34.9	Mets Road	Open cut
	35.9	Anderholt Road	Open cut
	36.9	Barbara Worth Road	Open cut
	37.9	Meloland Road	Open cut
	27.4	Holdridge Road	Open cut
	39.1	Interstate 8	Bore
	40.4	Bowker Road/East Ross Road	Bore
	41.7	East Hamilton Road	Open cut
	42.2	East Gillette Road	Open cut
	42.9	East Evan Hughes Road	Bore
	43.4	State Route 111	Bore
	44.7	Cooley Road	Open cut
	45.6	North Dogwood Road (County Highway S31)	Bore

Most smaller, unpaved roads and driveways would be open cut where permitted by local authorities or landowners. North Baja would implement several mitigation measures at open-cut crossings to ensure safety and to minimize traffic disruptions. For example, no roads would be closed unless adequate detours are provided. If a detour is required, traffic would be rerouted to another nearby road. This would not result in a significant change in the level of service of Project-area roadways (see Section 4.10.3). If no reasonable detour is feasible, North Baja would leave at least one lane of traffic open. Where Project construction crosses roads necessary for access to private residences and no alternative entrance exists, North Baja would implement measures (e.g., plating over the open portion of the trench) to maintain passage for landowners and emergency vehicles. Most open-cut crossings would be completed and the road resurfaced in 1 or 2 days; therefore, construction would not cause the closure of a roadway for more than 48 hours consecutively.

During the scoping process, comments were received regarding the potential for future settling of roads that would be crossed using the open-cut method. To address these concerns and to further minimize the potential for noticeable deterioration of local roadway surfaces, North Baja would prepare construction specifications that are designed to avoid settling of the finished grade and would also require the contractor to repair any settling, should it occur. If road settlement attributed to pipeline construction occurs after the pipeline is in operation, North Baja would make the necessary repairs as required by the jurisdictional agency. Implementation of North Baja's proposed mitigation measures for open-cut road crossings would reduce impacts associated with the Project to less than significant levels.

During the scoping process, the USCIS expressed concern about the ability to maintain access across roads used by the Border Patrol. North Baja consulted with the Border Patrol about any concerns it may have and the Border Patrol stated that it has not identified any concerns about the Project (Whipple 2006).

In addition to the roads crossed, several miles of both the B-Line and IID Lateral as well as the Arrowhead Extension would be within or adjacent to roadways (see Table 2.2.1-1). Major roadways potentially affected by construction and operation of these facilities include 18th Avenue, Arrowhead Boulevard, SR 78, Ogilby Road, Interstate 8, and several Imperial County roadways (e.g., Evan Hewes Highway, Hunt Road, and East Ross Road). A discussion of each of these roadways is provided below.

18th Avenue

Construction of the B-Line would take place within the road or road shoulder of 18th Avenue for about 7.6 miles between MPs 2.9 and 10.5. The B-Line would also be adjacent to the roadway for another 0.6 mile between MPs 2.3 and 2.9. Although 18th Avenue is not a heavily traveled roadway, 24 residences and 2 businesses are along the proposed route. To minimize road closures or periods of restricted access, North Baja plans to designate a specialized crew for construction within 18th Avenue. This crew would have experience with working in congested areas and would have two major components. The first crew would install the pipeline through the major crossings, and the second crew would be responsible for the installation of pipeline sections between crossings. Construction would advance at an estimated 500 feet per day; however, to expedite completion and thereby minimize the duration of inconvenience to residents, construction may occur at numerous locations along 18th Avenue simultaneously. Direct construction impacts at any given location are expected to last about 2 to 3 weeks (excluding repaving).

North Baja has developed a Traffic Management Plan for 18th Avenue in consultation with the County of Riverside Transportation Department (see Appendix H). The plan identifies traffic control measures; traffic signage requirements; construction measures to comply with the CalTrans Traffic Manual; construction hours; vehicular, pedestrian, and emergency vehicle access provisions; nightly shut-

down procedures; clearance distance between excavations and vehicular traffic; placement of safety fencing; and construction equipment storage. The plan identifies the following mitigation measures to minimize traffic-related impacts associated with construction within 18th Avenue:

- the pipeline would be installed with a minimum of 36 inches of cover and 12 inches of separation from other utilities or obstructions. A minimum of 2 feet would be maintained under canals and 5 feet over drains;
- intersections would be bored or trenched (trenched intersections would be steel plated if construction does not occur on consecutive days);
- North Baja would contact each owner and/or tenant of the properties abutting the road to explain the construction process and identify any special conditions or concerns that need to be incorporated into the construction plans. In addition, these adjacent residents and businesses would be notified by hand-delivered flyers 2 weeks before construction. The flyers would include the dates of construction, work hours, traffic detours, and contact numbers for North Baja and the contractor. Emergency response agencies would also be notified of the work schedule;
- the Underground Service Alert would be notified at least 48 hours before beginning work;
- flag persons would be provided to route traffic around construction equipment and obstructions;
- work would be scheduled during daylight hours unless alternative schedules are authorized;
- access would be maintained to all residences or businesses except during actual trenching operations. Steel plates would be available to maintain access to driveways during periods when the trench is open;
- non-local traffic would be detoured around construction activities;
- one lane of restricted traffic movement would be maintained through the construction area. This would allow residences, businesses, and emergency vehicles reasonable access during the construction activities;
- during non-work times, the work area would be secured and patrolled to minimize safety hazards associated with open trenches, heavy equipment, and other construction operations; and
- open trenches would be covered or cordoned off during non-working hours.

The non-local traffic that would be detoured around construction activities would be directed to a road parallel and typically only 1 block north or south of 18th Avenue. This would not result in a significant change in the level of service of Project-area roadways (see Section 4.10.3). Implementation of North Baja's Traffic Management Plan for 18th Avenue would reduce impacts associated with construction of the B-Line to less than significant levels.

Arrowhead Boulevard

Between 18th and Seeley Avenues (MPs 0.0 and 1.0), the Arrowhead Extension would be within the right-of-way of Arrowhead Boulevard. North Baja would use the same construction methods between MPs 0.0 and 1.0 of the Arrowhead Extension as those described above for portions of the proposed B-Line within 18th Avenue. North Baja has indicated that it would implement the measures identified in its Traffic Management Plan for 18th Avenue (see Appendix H) to also minimize traffic-related impacts along Arrowhead Boulevard; however, the Traffic Management Plan for 18th Avenue is not specific to Arrowhead Boulevard. Therefore, to ensure that site-specific conditions along Arrowhead Boulevard are addressed, **the Agency Staffs recommend that:**

- **North Baja shall prepare a Traffic Management Plan for Arrowhead Boulevard in consultation with the County of Riverside Transportation Department to detail the specific measures that would be used to control traffic during construction of the Arrowhead Extension. North Baja shall file the plan with the FERC and the CSLC for the review and written approval of the Director of OEP and the Executive Officer of the CSLC before construction.**

Implementation of North Baja's proposed measures and the Agency Staffs' recommended Traffic Management Plan for Arrowhead Boulevard would reduce impacts associated with construction of the Arrowhead Extension to less than significant levels.

State Route 78

SR 78 is a two-lane State-maintained facility with wide shoulders. The B-Line would cross SR 78 in two locations (MPs 8.5 and 28.2). North Baja would bore these two crossings. The B-Line would also be adjacent to SR 78 between MPs 30.9 and 31.3 and MPs 37.0 and 47.4 but it would not be within the road right-of-way except at the two road crossings. Because these two crossings would be bored, no significant impacts on this roadway have been identified.

Ogilby Road

Ogilby Road is a two-lane county roadway that connects SR 78 with Interstate 8. Ogilby Road would be crossed twice during construction of the B-Line (MPs 55.0 and 74.5). North Baja would bore these two crossings. In addition, the B-Line would be adjacent to Ogilby Road between MPs 55.0 and 61.0 and between MPs 66.8 and 74.5 but it would not be within the road right-of-way except at the two road crossings. Because these two crossings would be bored, no significant impacts on this roadway have been identified.

Interstate 8

Interstate 8 is a major east-west freeway crossing southern Arizona and California. Interstate 8 would be crossed by the B-Line at MP 75.1 and by the IID Lateral in four locations (MPs 2.4, 5.7, 27.3, and 39.1). North Baja would either HDD or bore each of these crossings. The HDD method is described in Section 2.3.2. Similar to the bore construction method, the HDD method would result in little or no disruption to traffic. As a result, no significant impacts on this roadway have been identified.

Imperial County Roadways

Construction of the IID Lateral would occur within several Imperial County roadways (e.g., Evan Hewes Highway, Hunt Road, and East Ross Road). To avoid or minimize impacts along these roadways, North Baja developed a Traffic Management Plan for Imperial County Roads (see Appendix H). The plan identifies the same mitigation measures as discussed above for 18th Avenue. In addition, North Baja would install the pipeline in sections and would have a specialized crew designated for construction to minimize road closures or periods of restricted access along Imperial County roadways. In contrast to construction procedures for 18th Avenue, North Baja would close off 0.5- to 1.0-mile-long sections of road and reroute traffic around the area through the use of signs and detours (while maintaining access for residents and emergency vehicles). The detours would direct traffic to another nearby roadway and would not result in a significant change in the level of service of the roadway. No more than 2 miles of work area would be active at any one time, and construction would advance along the roadway at an estimated 0.5 mile per day. Excluding any repaving that may be required, direct construction impacts at any given location would last no more than 2 to 3 weeks. Implementation of these measures and North Baja's Traffic Management Plan for Imperial County Roads would reduce impacts associated with construction of the Project to less than significant levels.

4.10.3 Increased Vehicle Traffic

Construction of the North Baja Pipeline Expansion Project would result in temporary increases to traffic levels due to the commuting of the construction workforce to the Project area as well as the movement of construction vehicles and delivery of equipment and materials to the construction work area. Table 4.10.3-1 identifies the average daily traffic counts and the existing level of service of the major roadways potentially affected by the Project. As indicated in Table 4.10.3-1, the roadways in the Project area have a level of service of A or B.

Table 4.10.3-2 lists the types of construction vehicles and estimated number of trips associated with the Project. North Baja estimates that during peak construction up to 400 people would be working along the B-Line. Based on an industry standard of 1.3 people per car, the resulting number of roundtrips per day is expected to be about 308. Because pipeline construction work is generally scheduled to take advantage of all daylight hours, workers would commute to and from the contractor yards and construction right-of-way during off-peak traffic hours (e.g., before 7:00 AM and after 6:00 PM). Construction workers would typically meet at the contractor yards and share rides to the construction right-of-way, thereby reducing overall traffic. In addition, work would be spread along the length of the construction spread, which would reduce the impact on traffic at any one location.

TABLE 4.10.3-1			
Major Roadways Potentially Affected by the North Baja Pipeline Expansion Project			
Facility/County/Road	Mileposts	Average Daily Traffic Count	Existing Level of Service ^a
B-Line			
Riverside			
18 th Avenue	2.3 - 10.5	636	A
State Route 78	8.5	1,700	B
Imperial			
State Route 78	28.2	1,700	B
	30.9 - 31.3	2,700	
	37.0 - 47.4		
Ogilby Road	55.0 - 61.0	540	--
	66.8 - 74.5	700	A
Interstate 8	75.1	12,000	A
Arrowhead Extension			
Riverside			
Arrowhead Boulevard	0.0 - 2.1	--	--
IID Lateral			
Imperial			
Interstate 8	2.4, 5.7, 27.3, 39.1	12,000	A
Evan Hewes Highway	8.0 - 27.1	1,000 ^b	--
Hunt Road	27.6 - 38.7	--	--
East Ross Road	39.6 - 41.3	5,630	--
^a Level of service is defined as a qualitative measure describing operational conditions in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. A level of service of A indicates that a roadway has little or no delay or congestion. A level of service of B indicates that a roadway has slight congestion or delay.			
^b Through the City of El Centro, Evan Hewes Highway serves as Adams Avenue (a four-lane facility) and is estimated to carry approximately 9,000 vehicles per day; however, most other segments of the highway, including those affected by the proposed Project, provide only one travel lane per direction and are estimated to carry approximately 1,000 vehicles per day.			
-- Average daily traffic counts and/or level of service have not been established for these roadways.			
Source: California Department of Transportation 2002.			

TABLE 4.10.3-2						
Anticipated Construction Traffic Associated with the North Baja Pipeline Expansion Project						
Facility	Duration (months)	Daily Workforce Vehicle Roundtrips	Truck Roundtrips		Contractor Yard	
			Pipe Stringing	Daily Other Trucks	Pipe	Materials
Arrowhead Extension, Blythe-Arrowhead Meter Station, Aboveground Facility Modifications	2 to 4	38	3 trips daily, over 3 weeks	30	Ripley Yard	18 th Avenue Yard
B-Line	4 to 6	308	40 trips daily, over 12 to 16 weeks	100	Ripley Yard	18 th Avenue Yard
IID Lateral	2 to 4	115	5 trips daily, over 10 to 20 weeks	70	Ripley Yard	IID Lateral Yard

In addition to the construction workforce, the delivery of construction equipment and materials to the construction work area could temporarily congest existing transportation networks at specific locations. The construction equipment would be initially staged at a pipe storage and contractor yard and then transported to the construction right-of-way using surfaced streets and approved access roads (see Table 4.10.3-2). Once a vehicle leaves the pipe storage or contractor yard, its exact route would vary depending on the current location of construction activity. Equipment would be dropped off in one location and would then move in a linear direction along the right-of-way. As a result, most equipment would be on the pipeline right-of-way and would not affect traffic on local roads after its initial delivery to the construction site. Truck traffic associated with pipe hauling during construction of the B-Line would have the greatest potential to impact traffic levels. During B-Line construction, pipe in lengths of 60 to 80 feet would be hauled from the yards by trailer trucks during the daylight hours for an approximately 12- to 16-week period. It is estimated that during this period 40 truck loads of pipe would travel between the Ripley Contractor Yard and the pipeline route each day. North Baja states that the movement of materials and equipment to the construction work area would add as many as 100 truck trips per day and that most of these deliveries would occur during early morning and evening hours.

Overall, the number and frequency of construction vehicle trips would be low on any particular roadway at any one time because construction would move sequentially along the Project right-of-way. A discussion of impacts on transportation during construction across and within roadways is presented in Section 4.10.2. Trips by vehicles that would visit the right-of-way on a regular basis (e.g., pickup trucks, crew vehicles) would be distributed along the length of the route as the pipe is installed and construction activity progresses to a different part of the right-of-way. Truck traffic associated with transporting pipe and other materials to the construction work area could result in temporary detours or obstructions in traffic flow due to vehicle size or may require short-term assistance from local police in limited instances. However, the Project would not cause an increase in traffic that would be substantial in relation to the existing traffic load and capacity. As a result, because most roadways in the Project area currently operate at a level of service of A or B, the relatively minor increase in traffic associated with the Project would not result in a significant change in the level of service on any roadway. Therefore, impacts associated with increased traffic levels during construction of the Project would be less than significant.

North Baja and its contractors would comply with local road weight limits and restrictions and would keep roads free of mud and other debris that may be deposited by construction equipment; therefore, the Project would not create a safety hazard for vehicles or pedestrians. Track-driven equipment would cross roads on tires or equipment pads to minimize road damage. Because North Baja would repair any roadways damaged by construction activities, the Project would not result in noticeable deterioration of local roadway surfaces.

No significant impacts would be expected during operation of the Project because there would be only minimal traffic associated with operation and maintenance of the pipelines. Because no new permanent employees would be required to operate the facilities, traffic levels during operation would be the same as currently experienced for operation of North Baja's A-Line.

4.10.4 No Project Alternative

Under the No Project Alternative, the FERC would deny North Baja's application for a Certificate and a Presidential Permit amendment, the CSLC would deny North Baja's application for an amendment to its right-of-way lease across California's Sovereign and School Lands, and the BLM would deny North Baja's application to amend its existing Right-of-Way Grant and obtain a Temporary Use Permit for the portion of the Project on Federal lands. The No Project Alternative means that the Project would not go forward and the Project-related facilities would not be installed. Accordingly, none of the

potential impacts on transportation and traffic identified for the construction and operation of the proposed Project would occur.

Because the proposed Project is privately funded, it is unknown whether North Baja would fund another energy project in California. However, should the No Project Alternative be selected, the energy needs identified in Section 1.1 would likely be addressed through other means, such as through other LNG or natural gas-related pipeline projects. Such projects may result in potential environmental impacts of the nature and magnitude of the proposed Project as well as impacts particular to their respective configurations and operations; however, these impacts cannot be predicted with any certainty at this time.